CPHE

ASSESSMENT OF PRIMARY HEALTH CARE NEEDS

(An Exploratory Study of A Rural Area in Karnataka)

by

Dr. JAGDISH C. BHATIA

Assisted by

N. S. Sanath Kumar

Centre for Population & Health Management

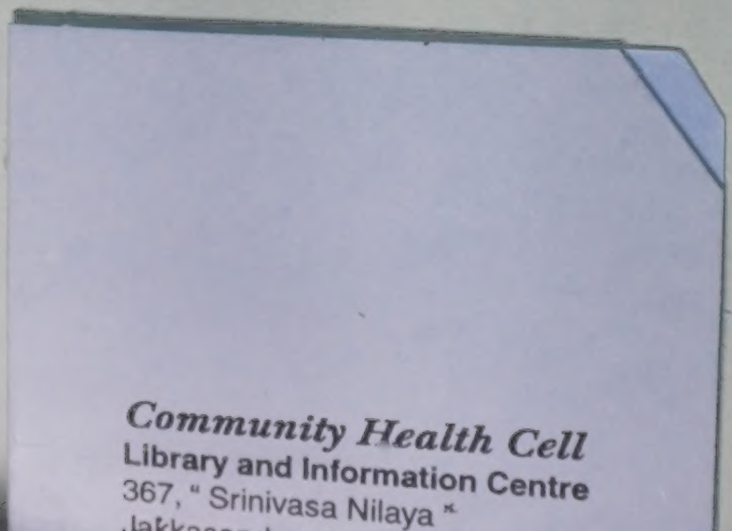
Indian Institute of Management

Bannerghatta Road, Bangalore-560076

Tel : 632450, Grams : Management, Telex : 0845-2472

August 1983

02810
CPHE


Community Health Cell
Library and Information Centre
367, " Srinivasa Nilaya "

PREFACE

An effective planning for health services to meet the goal "Health for All by 2000 AD" requires realistic appraisal of community health needs as well as actions taken by the people to meet those needs. Since many of the health needs of the community are met through the private sector, the records maintained by the government health facilities provide little help in enunciating those needs and often give a distorted picture. For this, community surveys are necessary. This exploratory study to assess primary health care needs was conducted in a PHC area of Bangalore district in Karnataka state with funds provided by the Indian Institute of Management, Bangalore. Since this study has been carried out in a small rural community, the statistical findings given are only indicative in nature and are presented with a view to demonstrate the usefulness of such studies in generating wealth of data which can be effectively used for planning, implementation and evaluation of primary health care programmes at the micro level.

The field work for this project was carried out by Miss.R.Syamala and Miss.B.Annapurna B. Kammar under the field supervision of Mr.N.S.Sanath Kumar. They worked long hours under difficult rural conditions. I have great appreciation for their hard work and dedication. In addition to supervising the work of interviewers in the field Mr.Sanath Kumar helped in establishing excellent rapport with the village leaders and health officials which is so essential for carrying out a study

... ii

of this type. He also collected information through secondary sources and provided necessary help in the coding, tabulation and analysis of data. I put it on record my great admiration for his hard work, diligence and sense of responsibility. My thanks are due to Mr.D.Stanley Jayaseelan for beautifully typing the manuscript and laborious statistical tables at a very short notice.

In this work many health officials of the Karnataka Health Department helped us. I am particularly grateful to Dr.S.Abdul Kareem, Joint Director of Health and Family Welfare and Dr.Sheik Ahmed, District Health and Family Welfare Officer, Bangalore for the cooperation so willingly extended.

I would also like to express my gratitude to Prof.N.Krishnaswamy (Dean, Research) and Prof.S.Shivaramu (Dean, Programmes) for their constant encouragement and support.

Bangalore

August 14, 1983.

JAGDISH C. BHATIA

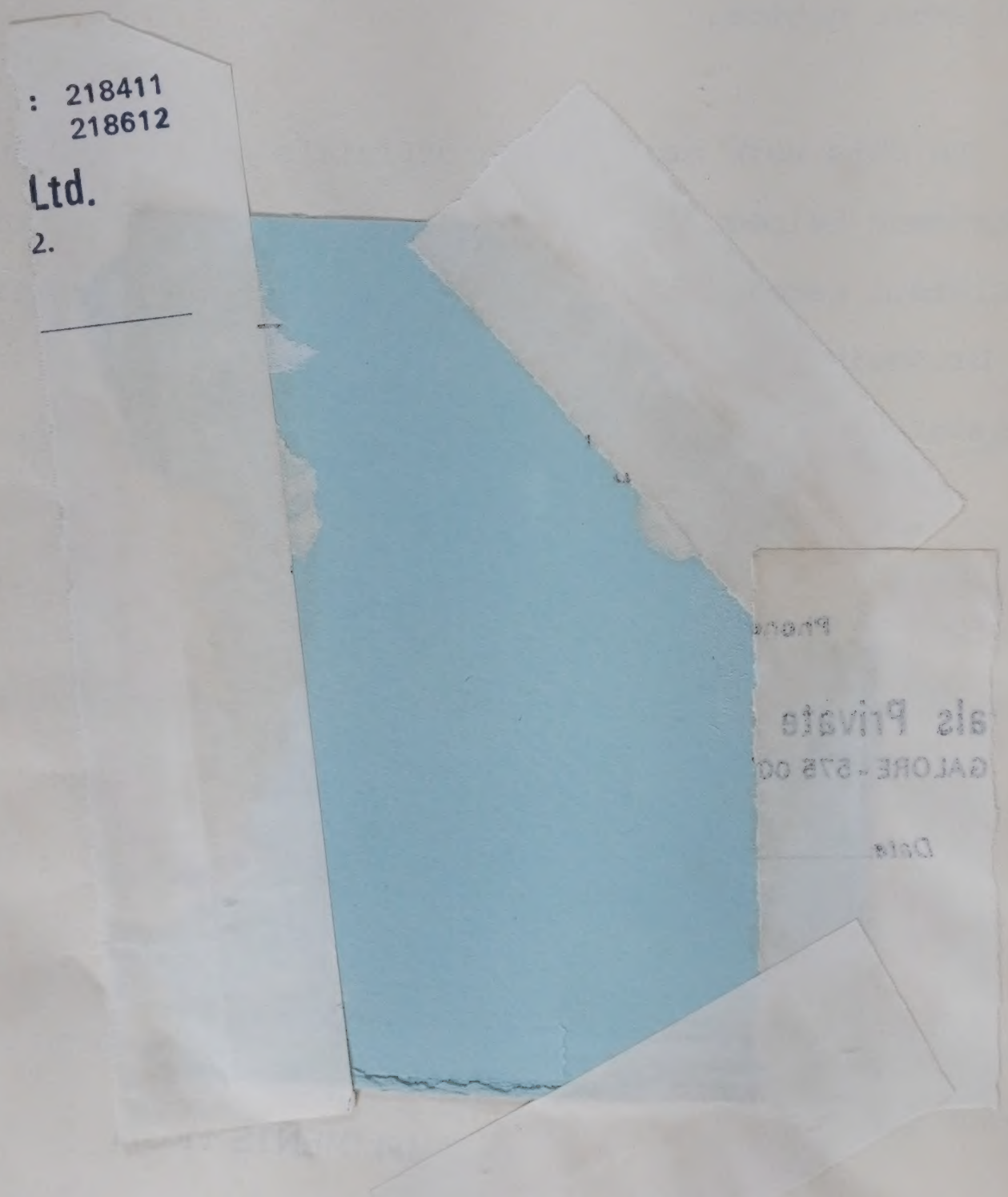
WITH COMPLIMENTS FROM

Dr. J. C. BHATIA
Chairman (Research & Publications)
Indian Institute of Management
Bannerghatta Road,
Bangalore-560 076, India

: 218411
218612

Ltd.

2.



COMMUNITY HEALTH CELL
Koramangala

TABLE OF CONTENTS

PREFACE		i
Table of Contents		iii
List of Tables		iv
Chapter I	Introduction	1
Chapter II	Research Design	24
Chapter III	Study Area and Population Characteristics	31
Chapter IV	Housing and Sanitation	54
Chapter V	Awareness and Utilization of Health Services	64
Chapter VI	Individual Health Problems and Actions	78
Chapter VII	Maternal, Child Health and Family Planning	137
Chapter VIII	Mortality	161
Chapter IX	Summary and Conclusions	167

LIST OF TABLES

Sl.No.	Table No.	Title	Page
1	1.1	Recognized Pattern of Primary Health Centres	7
2.	3.1	Sex-wise Rural-Urban Distribution of Population of Magadi Taluka	32
3.	3.2	Staffing Pattern of PHC Solur	33
4.	3.3	Distribution of sample population by age and sex	34
5.	3.4	Population distribution as basis for need determination	36
6.	3.5	Distribution of population by age according to sex	37
7.	3.6	Distribution of worker and nonworker population according to sex	38
8.	3.7	Distribution of work-force according to main economic activity	39
9.	3.8	Size of landholdings according to type of village	40
10.	3.9	Marital status of population	41
11.	3.10	Distribution of households according to religion and type of village	43
12.	3.11	Distribution of Hindu households according to caste and type of village	44
13.	3.12	Type of family according to size of family	46
14.	3.13	Position held in village organization by household members according to location	47
15.	3.14	Point of outside contact for marketing, recreation etc., according to type of village	49
16.	3.15	Households having members studying or working outside the village	51
17.	3.16	Ownership of radio/transistors by households and type of village	52
18.	3.17	Frequency of newspapers readingby household members by type of village	53

....v

Sl.No.	Table No.	Title	Page
19.	4.1	Type of Housing according to type of village	55
20.	4.2	Number of rooms in the household according to type of village	56
21.	4.3	Provision of electricity according to type of village	57
22.	4.4	Use of latrine according to type of village	57
23.	4.5	Animals' presence in the households according to type of village	59
24.	4.6	Main source of drinking water according to type of village	60
25.	4.7	Disposal of household refuse according to type of village	62
26.	4.8	Type of drains existing according to type of village	63
27.	5.1	Awareness of the Community regarding the existence of Primary Health Centre	64
28.	5.2	Awareness of the Community regarding the existence of sub-centres	65
29.	5.3	Awareness of the Community regarding the existence of Primary Health Units	66
30.	5.4	Utilization of services available at the PHC by community by type of village	67
31.	5.5	Utilization of services available at the SCs by the community	67
32.	5.6	Utilization of services available at PHUs by people	68
33.	5.7	Reasons for not using PHC services as given by people according to type of village	69
34.	5.8	Reasons for not using SCs as indicated by people according to type of village	70
35.	5.9	Reasojs for not using PHU services as indicated by people	71

....vi

Sl.No.	Table No.	Title	Page
36	5.10	Use and Community satisfaction of PHC services	72
37.	5.11	Reasons for dissatisfaction from PHC services	73
38.	5.12	Use and community satisfaction with sub-centre services	73
39.	5.13	Reasons for dissatisfaction from SCs	74
40.	5.14	Use and community satisfaction with PHU services	75
41.	5.15	Reasons for dissatisfaction with PHU services	75
42.	5.16	Number of households reporting contacts by health staff according to type of village	77
43.	6.1	Immunization status of population	79
44.	6.2	Chronically disabled/ill persons by type of diability, age and sex	80
45.	6.3	Number of households reporting illness cases by type of village	82
46.	6.4	30 selected specific and 12 broad categories of diagnosis	84
47.	6.5	Diognostic categories of illness episodes by type of village	86
48.	6.6	Distribution of illness episodes by age and type of village	87
49.	6.7	Distribution of illness episodes by sex and type of village	89
50.	6.8	Morbidity incidence and prevelance rates by age and sex	91
51.	6.9	Professional consultation for illness episodes by type of village	92
52.	6.10	Professional consultation by number of symptoms	94
53.	6.11	Professional consultation by duration of illness	96

.....vii

Sl.No.	Table No.	Title	Page
54.	6.12	Type of practitioners consulted by location of patients	97
55.	6.13	Duration of illness according to type of consultation	99
56.	6.14	Location of practitioners by location of patients	100
57.	6.15	Reasons for preference of practitioner by type of practitioner	102
58.	6.16	Number of visits made to practitioners' clinic	104
59.	6.17	Number of persons accompanying patient to practitioners' clinic	105
60.	6.18	Proxy visits to practitioners' clinic	107
61.	6.19	Home visits by practitioners	107
62.	6.20	Distance of practitioners from location of patients	109
63.	6.21	Distance travelled by patients by type of practitioners	110
64.	6.22	Mode of travel of patients to practitioner	111
65.	6.23	Travel time(one way) from patients residence to practitioners' clinic	113
66.	6.24	Consultation content by type of practitioners	114
67.	6.25	Type of examination conducted by practitioner by type of practitioners	116
68.	6.26	Laboratory tests ordered according to type of practitioners	117
69.	6.27	Type of medication dispensed by type of practitioners	119
70.	6.28	Type of medication prescribed by type of practitioners	120
71.	6.29	Pattern of advice given according to type of practitioners	122

....viii

Sl.No.	Table No.	Title	Page
72	6.30	Place of purchase of prescribed medicine by location of patients	123
73.	6.31	Fees paid to practitioner by type of practitioner	125
74.	6.32	Cost of drugs according to type of practitioner	127
75.	6.33	Cost of travel according to type of practitioner	128
76.	6.34	Cost of travel(escort) by type of practitioner	130
77.	6.35	Cost of additional recommended items by type of practitionres	132
78.	6.36	Summary of expenditure per episode by type of practitioner	134
79.	6.37	Mode of payment of medical cost by type of practitioner	135
80.	6.38	Number of days lost due to illness by location of patients.	136
81.	7.1	Age at marriage by type of village	139
82.	7.2	Fertility Profile of women in reproductive age groups	140
83.	7.3	Age specific and total fertility rates	143
84.	7.4	Place of birth of last child by type of village	144
85.	7.5	Antenatal problems of women by type of village	146
86.	7.6	Intra-natal problems by type of village	147
87.	7.7	Post natal problems by type of village	148
88.	7.8	Problems of the newborn by type of village	149
89.	7.9	Source of antenatal care provided by type of village	151
90.	7.10	Reasons for preference of reported source of antenatal care by type of village	152

...ix

Sl.No.	Table No.	Title	Page
91	7.11	Source of care during delivery by type of village	154
92.	7.12	Reasons for preference of source of care during delivery by type of village	155
93.	7.13	Source of postnatal care by type of village	156
94.	7.14	Reasons for preference of source of postnatal care by type of village	158
95.	7.15	Reported cost of last pregnancy by type of village	159
96.	7.16	Types of family planning methods used by type of village	161
97.	8.1	Age and sex distribution of deceased persons according to type of village	165
98.	8.2	Causes of deaths by age groups	166

CHAPTER I

INTRODUCTION

1. Primary Health Care
2. Government health facilities in rural areas
3. Functions of Primary Health Centres
4. Multipurpose Workers Scheme
5. Impact of Primary Health Centres on the health status of the rural population
6. Indigenous Medicine Practitioners
7. Community Health Workers Scheme
8. Traditional Birth Attendants
9. Reasons for underutilization of health services
10. Need for the study

CHAPTER I

INTRODUCTION

1.1 PRIMARY HEALTH CARE

An international conference jointly sponsored and organised by the World Health Organisation (WHO), and United Nations Children's Emergency Fund (UNICEF) was held at Alma-Ata (USSR) from September 6 to 12, 1978. The objectives of this Conference were to exchange information on the development of Primary Health Care and to promote this concept among the Member States of the United Nations. The Conference, after a considerable amount of deleberation, declared that Primary Health Care be made accessible to all by the year 2000 AD., The Primary Health Care was defined as "essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost that the community and country can afford. It forms an integral part both of the country's health system of which it is the nucleus and of the overall social and economic development of the community"[1]. Further, the services to be provided under Primary Health Care will include "Promotion of proper nutrition and an adequate supply of safe water; basic sanitation; maternal and child health, including family planning; immunization against the major infectious diseases, prevention and control of

.....2

locally endemic diseases, education concerning prevailing health problems and methods of preventing and controlling them; and appropriate treatment for common diseases and injuries".[2] Since India is signatory to this declaration we are committed to make these services available to all our population by the turn of the century. Considering the vastness of our population and geographical coverage, this by no means, is an easy task. An overwhelming majority of India's population lives in the rural areas and this segment of the population has remained neglected so far as health and medical care facilities are concerned. For instance, while 80 percent of the population lives in the countryside, 80 percent of the doctors have settled down in the urban areas. Further, there are intra-rural imbalance of services as functionally much of the available manpower is distributed in bigger villages. The smaller and difficult to reach villages have no facilities whatsoever[3]. Furthermore, available estimates in India show that by rural urban break up of services the urban population has 8-10 times more institutional facilities and 12 times more hospital beds[4]. Although there has been a considerable improvement in health manpower in India during the last two decades, the rural-urban ratio has remarkably remained unchanged[5].

.....3

1.2 GOVERNMENTAL HEALTH FACILITIES IN RURAL AREAS

The governmental medical care facilities available to Indian villages thus far are mainly through the Primary Health Centres (PHCs). The origin of these centres can be traced to the Report of the Health Survey and Development Committee (BHORE Committee) 1946, which proposed the creation of a chain of health centres to provide both curative and preventive services nearest to the peoples homes. Some of the relevant recommendations of the Committee were[6] :

1. Medical and health services should be totally tax supported and medical persons should be fully salaried.

2. Priority should be given to rural needs and primary health centres with 75 bed hospitals should be provided for each 10 to 20 thousand population regionalised around secondary centres with 650 bed hospitals again regionalised around district hospitals with 2500 beds;

3. Curative and preventive services should be combined at all administrative levels with emphasis on a massive expansion of preventive programmes; and

4. Major changes on medical education should be required in order to prepare "social physicians".

.....4

When in 1950 the Planning Commission was set up to fulfil the provisions of the Constitution and its directive principles the need for an integrated approach to the rural problems was well recognised by our planners and policy makers, and it was endorsed by the Central Council of Health at its first meeting in 1950. Such an approach became the corner stone of all our Five Year Plans wherein there has been a continuous emphasis on the implementation of the community development programmes to exterminate the triple enemies of poverty, illness, and ignorance. The main aim of the programme was to ensure the active participation of the rural community in the tasks of development. Under this programme primary health centres were established in 1952 to take care of health and medical care needs of the people. At present there are 5400 primary health centres and 38000 sub-centres in India.

1.3 FUNCTIONS OF PRIMARY HEALTH CENTRES

The different manuals prepared for the operations of these health centres contained a list of up to 30 functions which included everything from the provision of medical care for about 100,000 population living in an area of 150-200 sq. miles to conducting advanced type of health education campaigns[7]. An important document prepared in this connection

was by Dr.P.R.Dutt, wherein the services to be provided by these centres to the community have been listed as[8] :

1. Medical relief;
2. Control of communicable diseases;
3. Environmental sanitation with priority for safe water supply and sanitary disposal of human excreta;
4. Maternity and child health including family planning;
5. School health;
6. Health education; and
7. Vital statistics.

The staff initially recommended to provide the above services included: a medical officer, a compounder, a sanitary inspector, a public health nurse/lady health visitor, four auxillary nurse-midwives, a driver and 2 attendants.

However, later developments such as (a) the reorganisation of family planning programme; (b) its integration with maternal and child health and conversion into a public health programme through primary health centres provided basic infrastructure for entire geographical and population coverage and resulted in substantial increase in the responsibilities

.....6

of primary health centres. Since the state governments expressed their inability to meet the additional expenditure required for maintenance phase of malaria and other mass programmes like family planning, small pox, leprosy trachoma etc. two committees were constituted by the Government of India in 1965 and 1966 under the Chairmanship of Shri.B.Mukerji to work out details of additional staff required at primary health centre and at other higher levels of administration for provision of family planning and other basic health services. The additional staff recommended by the committee at the PHC level is shown in Table I.1[9].

The cost of the additional staff was to be entirely met by the Government of India.

The organisational structure of primary health centres can also be seen from Figure I.

.....7

TABLE 1.1

Reorganised Pattern of Primary Health Centres

STAFF	Initial Staff	Staff under family planning	Staff under basic health services	Total Staff
° Medical Officer	1	1	-	2
° Compounder	1	-	-	1
° Sanitary Inspector	1	-	-	1
° Health Inspector	-	-	2	2
° Family Planning Worker	-	4	-	4
° Health Visitor/ Public Health Nurse	1	1	-	2
° Auxiliary Nurse Midwife	4	6	-	10
° Basic Health Worker	-	-	8	8
° Lab Technician	-	-	1	1
° Extension Educator	-	-	1	1
° Computor (Statistical Clerk)	-	1	-	1
° Storekeeper	-	1	-	1
° Driver	1	-	-	1
° Ancillary	2	-	-	2
° Female Attendant	-	8	-	8

Based on a PHC population of 80,000.

.....8

FIGURE 1

Organisational Structure of Primary Health Centre

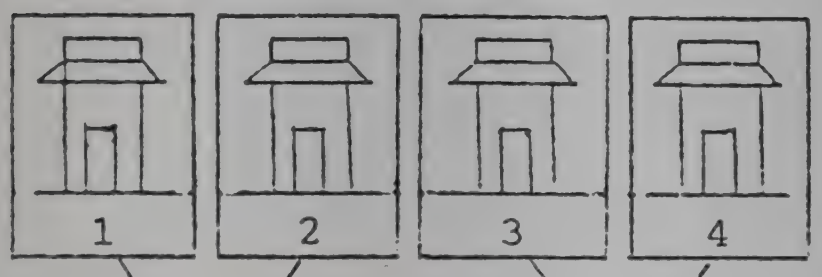
NORMAL STAFF	
Medical Officer	1
Compounder	1
Sanitary Inspector	1
Health Visitor	1
Aux Nurse Midwife	1
Class IV	2

PRIMARY HEALTH CENTRE

Population	80,000
Villages	100
Area	One N.E.S. Block

FAMILY PLANNING	
Medical Officer	1
Family Planning Field Workers	4
Health Visitors	1
Aus. Nurse Midwife	6
Ext. Educator	1
Computor	1
Store Keeper	1
Female Attendants	8

BASIC HEALTH SERVICE	
Health Inspector	2
Basic Health Worker	8
Lab Technician	1
Clerk	1



1 F. P. (FW) (for 2 Sub-centres or 20,000 popul.)

1 F. P. (FW) (for 2 Sub-centres or 20,000 popul.)

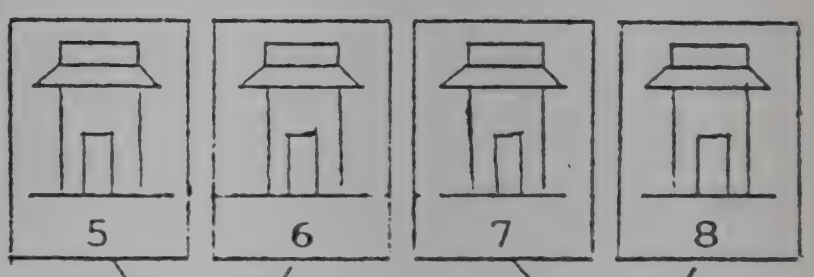
Subcentres : 8

Popul. 10,000 each

1 Health Visitor & 1 Health Inspector (for 4 Subcentres or 40,000 population)

Staff:

Basic Health Worker.... 1
Alx. Nurse Midwife..... 1
Female Attendant..... 1



1 F. P. (FW) (for 2 Sub-centres or 20,000 popul.)

1 F. P. (FW) (for 2 Sub-centres or 20,000 popul.)

1 Health Visitor & 1 Health Inspector (for 4 Subcentres or 40,000 population)

M C H and Family Planning | Control of Co muni-cable Diseases | Vital Statistics | Malaria and Smallpox Vigilance

Medical care | Environmental Sanitation | School Health | Health Education

BASIC HEALTH SERVICES

Source : Park, J.E., "Text-book of Preventive & Social Medicine" Publishers: Banarsidas Bhanot, M.A. Jabalpur, M.P. Page 616.

1.4 MULTIPURPOSE WORKERS SCHEME

These vertical programmes and multiplicity of workers however resulted only in confusion and resentment among the people. In 1967, the "Committee on Integration of Health Services" under the Chairmanship of Dr.N.Jungalwala, therefore, recommended integration of organisation and personnel in the field of health from the highest to the lowest level. In order to find out the structural changes required at the perephary and supervisory levels to bring about necessary integration of health and family planning services, a committee on "Multipurpose Workers under Health and Family Planning" was constituted by the Government of India in 1973 under the Chairmanship of Shri.Kartar Singh. The Committee recommended[11] that there should be one male and one female health worker for every 5000 rural population. Further, there should be a male health supervisor to supervise the work of 3-4 male health workers and a female supervisor to supervise the work of 4 female health workers. These workers will be responsible for providing all essential health and family planning services in their respective areas in an integrated manner. Necessary steps have been taken by the state governments to train multi-purpose workers to provide minimum health care in rural areas.

1.5 IMPACT OF PRIMARY HEALTH CENTRES ON THE HEALTH STATUS OF RURAL POPULATION

Thus far there has been no systematic effort to evaluate the impact of rural health institutions on the health status of the people. However, sporadic evidence does show that our health services have not been very effective in solving the ever growing health problems of our rural population. Although the primary health centres have been in existence for the last thirty years, their utilisation by the community has been rather poor. Studies of medical care services in India conducted by the World Health Organisation (WHO)[12], the Johns Hopkins University Rural Health Projects,[13] and National Institute of Health Administration and Education[14] indicate that only 10 to 20 percent of the villagers utilise the governmental health services. Furthermore, awareness and use of these facilities has been found to be limited to the villages where these services are located. People living in the perepheral villages either are unaware of these services or find it difficult to reach them because of communication difficulties and distance. These studies also indicate poor image of these PHCs among the rural people. Even among a small proportion of villagers who have used these facilities majority have shown dissatisfaction with the services, mainly because of

.....11

non-availability of medicines and impersonal behaviour of health functionaries. Apart from doctors, the primary health centres and sub-centres have a battery of para-medical personnel like basic health workers, auxillary nurse-midwives, family planning workers etc. (these unipurpose workers are now being converted to multipurpose workers) who are supposed to pay domicillary visits regularly in all the villages in their respective areas. The studies also show that a large proportion of the people in the rural areas are unaware of their existence.

Further, the primary health centres, as mentioned above, were established on the principles of integration of health services. They are supposed to provide seven types of services which are considered basic by the World Health Organisation (WHO). Studies show that the doctors hardly spend any time in preventive and promotive care. Maternal and child health services remain neglected[15-16].

1.6 INDIGENOUS MEDICINE PRACTITIONERS

Thus a large number of rural people continue to be attended by indigenous medicine practitioners. These indigenous medicine practitioners are not, however, those who use traditional herbs, oils and incantations and having

.....12

little or nothing to do with modern medicine. On the other hand, they are increasingly using modern medicines[17-23]. Their number is estimated to be about 400,000 (one for every 1300 population as against one qualified doctor of modern system of medicine for 4700 population), of course with considerable interstate variations[24]. In view of the inability of the government to provide adequate medical facilities to the rural people and recognizing the role, the indigenous medical practitioners could play in providing at least rudimentary medical care, the government of India, Ministry of Health and Family Planning put forward a proposal for Rural Health Scheme in the National Strategy during Fifth Five year plan which envisaged involvement of 250,000 indigenous medicine practitioners to augment the skeletal rural health services. Under this scheme one practitioner was to be recruited for an approximately 2000 population on a full time basis and on a monthly remuneration of 150 rupees[25]. Further, studies have shown that these practitioners had not only favourable attitudes towards family planning and abortions but were willing to provide necessary assistance in the public health and family planning programmes sponsored by the government. Some of these practitioners were reported to be already providing these services to their clients[26-30]. A study conducted

.....13

to find out the willingness of these practitioners to join the proposed rural health scheme revealed that: (a) only about one-sixth of the practitioners interviewed were agreeable to join the scheme under the conditions stipulated therein; (b) the younger practitioners (below the age of 25 years) were more willing compared with those of older age groups; (c) those who had longer experience in the profession, higher income and higher patient load were not keen to participate in the scheme; and (d) the majority of those who were ready to participate were not registered under any system of medicine.[31]

This scheme was later given up by the government in favour of Community Health Volunteers' Scheme described in the following paragraphs.

1.7 COMMUNITY HEALTH WORKERS' SCHEME

Of late, the government has realised that improvements in the health status of the people can be brought about not merely by increasing the number of doctors or increasing the output of drugs but by the active involvement of the community in the promotion and maintenance of their own health by making them realise through proper health education the need for preventive, promotive and rehabilitative health activities.

.....14

In order to ensure people's participation in all aspects of health care, the Government of India launched a Community Health Workers' Scheme in selected Primary Health Centres in the country on October 2, 1977. "This scheme is a distinct departure from the traditional approach of providing health services by the government agencies to the people. "The scheme breaks new ground in mobilising local resources and initiative and associating the local people with decisions which affect them directly. It is an expression of a new government approach to administration characterised by decentralisation, delegation and people's participation".[32] Under this scheme, for each village or community with a population of 1000 one person belonging to that community and enjoying their confidence has to be selected as a community health worker*. The community is to recommend 2-3 persons keeping in view the guidelines laid down for the purpose and the final selection is made by the medical officer of the primary health centre in consultation with block development authorities. The guidelines are: " (a) CHW may be of either sex; (b) the person selected must be a permanent resident of

---

* The nomenclature was changed to Community Health Volunteer in 1979 and later to the Village Health Guide in 1982.

.....15

that village itself and may be from any vocation; (c) He may even be a practitioner of one of the systems of medicine, residing in that village; (d) He/she should be able to read and write. However, since with higher level of education, better quality of service would be available, the person to be selected should have had formal education up to the sixth standard; (e) He should be social service minded and be able to spare 2-3 hours every day for community health activities; (f) He should be physically active and willing to serve at least for 3 years as community health worker;(g) He should be acceptable to all sections of the community;(h) He should not belong to any group, faction or political organisation of the village which may limit his acceptability".[33]

The selected candidates are given three months training during which period they are paid a stipend of Rs.600/- each. After training, they are given an honorarium of Rs.50/- per month, a kit and supply of medicines worth Rs.600/- every year.

1.8 TRADITIONAL BIRTH ATTENDANTS

An overwhelming majority of a births in the rural areas take place in the homes with the help of traditional birth attendants. The lack of asceptic measures, unclean habits, ignorance and dangerous superstitions on the part of these

.....16

traditional birth attendants result in a large number of maternal and neo-natal deaths. With a view to improve their skills, the Government of India has taken up an extensive programme for their training. This is a centrally sponsored scheme and the entire expenditure is borne by the central government. An evaluation of TBA training programme in the states of Karnataka and Maharashtra by the author reveal that the range of antenatal care provided by trained dais is much wider and they are able to manage antenatal complications much better than the untrained dais. The trained dais also conduct deliveries more safely and hygienically than their untrained counterparts. The trained dais have better contacts with the various health functionaries and motivate a significantly larger number of cases for family planning as compared to those who are not trained.[34-35]

1.9 REASONS FOR UNDERUTILISATION OF HEALTH SERVICES

The probable reasons for the underutilisation and ineffectiveness of our rural health services, as indicated in the preceding paragraphs, are :

(i) Most of our health services have grown at random based on intuitive judgements and depending upon the urgency of certain problems and availability

.....17

of resources - physical, financial and manpower. There has rarely been a clear perspective and scientific experimentation with various approaches to the delivery of health care services.

(ii) There has been no clear definition of the role and responsibilities of the PHC doctor and other functionaries. Studies have shown that there is no unanimity of opinion about the functions of primary health centre and the role of health centre doctor. There has been complete role ambiguity and role crisis which has seriously affected the planning and implementation of various rural health programmes and the performance of the doctor and other staff members.

(iii) Most of our health services were sponsored and initiated by the government and there has been no serious effort to involve the people in decision making process and in the mobilisation of local resources.

(iv) There has been no serious effort to assess the health needs of the people and the effective ways of meeting those needs. People's acceptance and cooperation would have been much easier to obtain if health

.....18

programmes were geared to their felt needs. Furthermore, no attempt has been made on a wider scale to investigate community's reactions to the programmes.

(v) There has been no proper and systematic evaluation of the activities of primary health centres which could have provided guidelines for improving the functioning of these rural health institutions.

1.10 NEED FOR THE STUDY

Thus a prerequisite to any planned effort to develop rural health services effectively in order to achieve the objective of 'Health For All by 2000 AD' is a realistic appraisal of community health needs and their pattern of health care seeking. It is only at the community level that the balance between health needs and demand can be enunciated and measured as a totality. Since action taken by people in response to felt needs are frequently outside the organised health system, the records maintained by the governmental institutions are of little help in determining the rural health needs of the community and thus often give a distorted picture.

.....19

REFERENCES

1. World Health Organisation and United Nations Children's Fund. Primary Health Care, Report of the International Conference on Primary Health Care. Alma-Ata, USSR, 6-12 September, 1978. Geneva-New York, 1978, pp.2.

2. Ibid pp.2.

3. Chuttani, C.S. ; Bhatia, J.C. ; Dharam Vir and Timmappaya, A. A study of private medical practitioners in the rural areas of a few states of India. Indian Journal of Medical Education, Volume 12, Number 3 and 4, 1973.

4. Government of India, Ministry of Health and Family Planning, D.G.H.S., C.B.H.I., Health Statistics of India, 1978.

5. Gandhi, H.S. and Bhatia, J.C. Assessment of health needs in the rural areas and working of the existing P.H.C. complex during the last 20 years. Proceedings of the Second National Seminar on Rural Medical Relief-Future Pattern. Indian Medical Association, New Delhi, 1973.

6. Government of India. Report of the Health Survey and Development Committee, Government of India Press, Simla, 1946.

7. Takulia, H.S. et. al. The Health Centre Doctor in India. The Johns Hopkins University Press, Baltimore, 1967.

.....20

8. Dutt, P.R. Rural Health Services in India. Primary Health Centre, Central Health Education Bureau, New Delhi, 1965.

9. Government of India, Ministry of Health. Report of the Committee on Basic Health Services (Mukerji Committee), New Delhi, 1966.

10. Park, J.E. Text-book of Preventive and Social Medicine, Banarsidas Bhanot Publishers, Jabalpur, 1974, pp.683.

11. Government of India, Ministry of Health and Family Planning. Report of Committee on Multipurpose Workers under Health and Family Planning (Kartar Singh Committee), New Delhi, 1973.

12. Griffith, D.H.S. Final Report on Public Health Programmes, Andhra Pradesh, W.H.O. Project, India, 151. SEA/PHA/30 , 7th June, 1963.

13. Johns Hopkins University, Department of International Health. Functional Analysis of Health Needs and Services, Asia Publishing House, New York, 1976.

14. Chuttani,C.S. Bhatia, J.C. Dharam Vir and Timmappaya, A. Factors responsible for underutilisation of primary health centres - A community survey in three states of India. NIHAE Bulletin, Vol.9, No.3, 1976, pp.229-237.

.....21

15. Parker, R.L. Murthy, A.K.S., and Bhatia, J.C. Relating health services to community health needs. Indian Journal of Medical Research, Vol.60, No.12, 1972.

16. Chuttani, C.S. Bhatia, J.C. and Timmappaya, A. Influence of private practice on integration of health services, NIHAE Bulletin, Vol.9, No.1, 1976, pp. 41-48.

17. Neumann, A.K., Bhatia, J.C., Andrew, S. and Murphy,A.K.S. Role of indigenous medicine practitioners - report of a study. Social Science and Medicine, Vol.5, 1971, pp.137-149.

18. Chuttani, C.S., Bhatia, J.C., Dharam Vir and Timmappaya, A. A study of indigenous medicine practitioners in the rural areas of five different states of India. Indian Journal of Medical Research, Vol.61, No.6, 1973, pp.962-67.

19. Bhatia, J.C., Dharam Vir., Timmappaya, A. and Chuttani, C.S. Traditional healers and modern medicine. Social Science and Medicine, Vol.9, No.1, 1975, pp.15-22.

20. Alexander, C.A. et.al. Traditional healers in a region of Mysore. Social Science and Medicine, Vol.5, 1971, pp.575.

21. Banerjee, D. Health behaviour of rural populations. Impact of rural health services. Economic and Political Weekly, Vol.8, 1973, pp.2261-68.

.....22

22. Verma, O.P. and Ramarao, D. Medical practitioners in rural India, their profile and role - a case study of Nasibpur Unions, NIHAE Bulletin, Vol.7, No.2, 1974, pp. 123-37.

23. Singh, Sohan et. al. Assessing the knowledge and practice of registered medical practitioners. NIHAE Bulletin, Vol.7, No.1, 1974, pp.5-19.

24. Government of India, Ministry of Health and Family Planning. D.G.H.S. CBHI, Pocket Book of Health Statistics, 1973.

25. Government of India, Ministry of Health and Family Planning, National Health Scheme for Rural Areas, May-June, 1972.

26. Bhatia, J.C., Neumann, A.K., Practitioners of indigenous medicine and India family planning programme. Indian Journal of Social Work, Vol.34, No.1, 1973, pp. 27-35.

27. Bhatia, J.C., Dharam Vir, Timmappaya, A. and Chuttani, C.S. Role of indigenous medicine practitioners in family planning programme: A study conducted in three states. Journal of Family Welfare, Vol.20, No.3, 1974, pp.18-27.

28. Neumann, A.K., and Bhatia, J.C., Family Planning and indigenous medicine practitioners. Social Science and Medicine, Vol.7, 1973, pp. 507-516.

.....23

29. Bhatia, J.C. and Mehta, S.R. Induced abortions: Opinions of the indigenous medicine practitioners. Indian Journal of Social Work, Vol.32, No.4, 1972, pp.434-43.

30. Bhatia, J.C. Abortionists and abortion seekers. Indian Journal of Social Work, Vol.34, No.3, 1973, pp.275-85.

31. Bhatia, J.C., Dharam Vir, Timmappaya, A. and Chuttani, C.S. Attitude of indigenous medicine practitioners towards the proposed rural health schemes, NIHAE Bulletin, Vol.5, No.4, 1973, pp.298-309.

32. Editorial, NIHAE Bulletin, Vol.10, No.3, 1977.

33. Goel, S.L. Health Care Administration : Levels and Aspects. Sterling Publishers Pvt. Ltd., New Delhi, 1980, pp. 16.

34. Bhatia, J.C., Evaluation of Traditional Birth Attendants Training Scheme in the State of Karnataka. Indian Institute of Management, Bangalore, 1982.

35. Bhatia, J.C., Evaluation of Traditional Birth Attendants Training Scheme in the State of Maharashtra. Indian Institute of Management, Bangalore, 1982.

****

CHAPTER II

RESEARCH DESIGN

1. Objectives of the Study
2. Study Area
3. Selection of Study Villages
4. Selection of Households
5. Household Survey Schedules
6. Organization of Fieldwork
7. Survey of PHC records
8. Analysis of Data
9. Limitations of the Study

CHAPTER II

RESEARCH DESIGN

2.1 OBJECTIVES OF THE STUDY

The main objectives of this study are to assess primary health care needs of a rural community and identify ways in which these needs are currently being met.

The specific objectives are:

(i) To quantify health needs as perceived by the community.

(ii) To identify the magnitude of morbidity that exists in a community during a given period of time.

(iii) To determine the level of fertility and mortality in a rural community.

(iv) To find out the pattern of utilization of existing health services.

(v) To study the awareness and attitudes of rural communities towards government health facilities.

(vi) To study the pattern of expenditure on health and medical care in a rural community.

(vii) To find out direct and indirect costs of all types of medical care.

2.2 STUDY AREA

The study was carried out in Solur primary health centre in Bangalore district of Karnataka State. Solur is located at a distance of 60 kilometres north-west of Bangalore on Bangalore-Mangalore highway. The selection of Bangalore district was purposive due to logistic reasons. In Bangalore district, there are 19 primary health centres and for the purpose of selecting one primary health centre detailed discussions were held with the senior officials of the Directorate of Health Services in Karnataka including the district health officer of Bangalore district. These officials were asked to suggest two typical PHCs. These two PHCs were visited by the research team and Solur was selected because of availability of necessary facilities for the stay of research team and accessibility of villages for the survey. Since it is a small pilot study no scientific sampling procedures could be possible or were necessary.

2.3 SELECTION OF STUDY VILLAGES

A list of all the villages covered by PHC Solur, along with their distances from the primary health centres and governmental health facilities existing, if any, in each of them was obtained. These villages were stratified according to the following criteria:

(i) Village where PHC is located; and

(ii) Villages within 5 kilometres from PHC;

.....26

(iii) Villages where primary health units are located;

(iv) Villages where sub-centres are located;

(v) Villages which are more than 5 kilometres away from the PHC headquarters and which do not have any other health facilities.

Two villages from each of the above strata were randomly selected except that for group 1, the PHC village was purposively selected and the other 1 village was randomly selected from the villages which are within 5 kilometres from the PHC.

2.4 SELECTION OF HOUSEHOLDS

A household list for each of the 8 selected villages was obtained from the PHC and updated with the help of village leaders. From each village 50 households were randomly selected. Thus a total of 400 households were selected for interview.

2.5 HOUSEHOLD SURVEY SCHEDULES

Six schedules, details of which are given below, were used to collect information from the selected households:

(i) Census Schedule: This schedule was canvassed to obtain information for each members of the sampled household with respect to his/her age, sex, relationship to the head of household, education, occupation and immunization status.

(ii) Socio-economic and Environmental health schedule:

Through this schedule information was elicited regarding socio-economic status of the household such as landholdings, income, religion, caste, positions held by household members in the village organizations, external contacts by individual members of the family. Information was also obtained through this schedule about the environmental sanitation and health conditions of the household such as disposal of household refuse, drainage facilities, housing conditions, patterns of contacts with the various health functionaries etc. This schedule was also used to identify sickness cases in the household, pregnancy status of married females, births and deaths taking place in the household during the last one year.

(iii) Illness Schedule:

This schedule was used to seek detailed information about each individual in the family who was reported to be sick during the reference period or 2 weeks. Data was collected about the symptoms of illness, duration of illness, action taken to palliate the sickness, number of days lost due to sickness etc.

(iv) Practitioners' Schedule:

This schedule was filled in all those cases of sickness where a medical practitioners, whether government

or private, qualified or unqualified, allopathic or indigenous, was consulted. Information was also collected regarding the profile of the practitioner and the type of treatment provided, procedures used, investigations ordered etc. All expenditures both direct and indirect, in connection with the illness, were also obtained.

(v) Maternity and Family Planning Schedule:

This schedule was administered to all currently married women in the reproductive age groups and information was collected from them about their pregnancy history, attitude towards and practice of various family planning methods, details and costs of previous delivery.

(vi) Death Schedule:

This schedule was used only in those households in which a death during the last one year had been identified. Information about the deceased with regard to cause of death, details of illnesses and treatment sought etc. was solicited.

2.6 ORGANISATION OF FIELD WORK

All the survey scheduled mentioned in 2.5 were administered to the head of the household or in his/her absence to some other responsible member of the household. In case the person(s) who have had illness episodes during the reference

period was other than the main interviewee, an effort was made to ascertain particulars of illness and action taken from the affected person. All the interviews were conducted by two female interviewers, one of whom had a post-graduate and the other graduate degree in social sciences. Both of them had long experience of interviewing in rural areas. Their work was closely supervised by an experienced assistant research officer. All the above field staff were given 2 weeks training before they were sent out in the field. The supervisor met the village leaders and explained the purpose of the survey. The actual field work commended only when excellent rapport had been established with the village leaders and their full cooperation assured. All the interviews conducted by the interviewers were scrutinised by the supervisor for completeness and consistency on a daily basis. The Principal investigator made frequent visits to the field to sort out any problems and to provide necessary support to the field staff.

2.7 SURVEY OF THE PHC RECORDS

In addition to the household survey, information was also obtained from the records maintained by the health centre and through interviews with the various health functionaries.

2.8 ANALYSIS OF DATA

The data collected was coded and punched for computer analysis. However, due to financial and other programming constraints, computer analysis could not be done. All tabu-

lations were prepared manually which inhibited the indepth analysis which was earlier planned. Time and resources permitting, further analysis will be taken up to prepare papers for professional journals.

2.9 LIMITATIONS OF THE STUDY

It is well known that there are seasonal variations in the patterns of diseases and medical care seeking behaviour. In order to arrive at a fairly accurate estimates of morbidity and household expenditures on sickness, a longitudinal study spread over a period of one year is necessary. However, since it is a one shot study covering a reference period of only 2 weeks, the various estimates given are only indicative in nature and are presented to demonstrate a methodology for assessing community health needs.

****

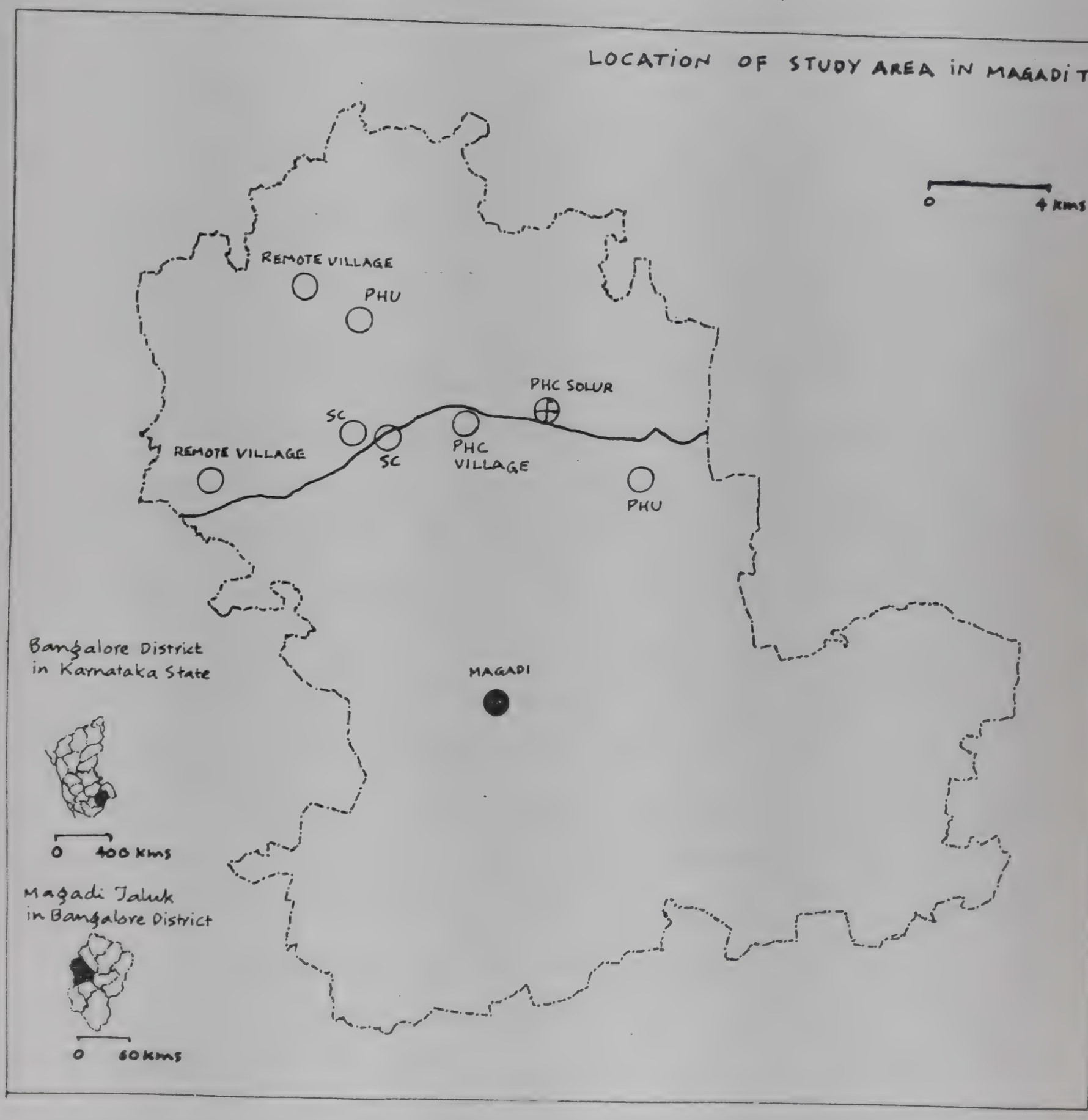
CHAPTER III

STUDY AREA AND POPULATION CHARACTERISTICS

1. Primary Health Centre Solur
2. Organizational Structure of PHC Solur
3. Primary Health Units
4. Age and sex distribution of population
5. Population distribution as basis for need determination
6. Levels of literecy
7. Dependency Status
8. Type of economic activity of work-force
9. Size of land holdings
10. Marital Status
11. Distribution of households by religion
12. Distribution of households by caste
13. Size of household by family type
14. Positions in village organizations by household members
15. Outside Contacts
16. Household members working and studying outside the village
17. Ownership of radio/transistor
18. Newspaper reading by household members

1.

LOCATION OF STUDY AREA IN MAGADI TQ.



CHAPTER III

STUDY AREA AND POPULATION CHARACTERISTICS

3.1 PRIMARY HEALTH CENTRE SOLUR

The primary health centre Solur forms a part of Magadi Taluka in Bangalore district of Karnataka state. The state of Karnataka, according to 1981 census, has a population of 37 million and covers an area of 1,91,773 sq. kilometres. The density of population thus works out to be 193 persons per sq. kilometre. During the decade 1971-81, the population of the state increased by 26.4 percent. There are 19 districts in the state. The Bangalore district, which was selected for the purpose of this study, has a population of 4.9 million and an area of 8005 sq. kilometres (1981 census). Whereas the district population during the decade 1961-71 grew by 34.4 percent, the decennial growth rate for 1971-81 works out to be 46.2 percent. In Bangalore district, there are 11 talukas and Solur is one of the primary health centres located in Magadi taluka which comprises 625 villages including hamlets and small non-revenue villages and covers an area of 936 kilometres. The density of population in the taluka, as per 1981 census, is 217 persons per sq. kilometre. The sexwise distribution of rural urban population of Magadi taluka is as under:

Taluka is an administrative unit below the district level.

TABLE 3.1

SEXWISE RURAL URBAN DISTRIBUTION OF POPULATION OF MAGADI TALUKA

	MALES		FEMALES		TOTAL	
	N	%	N	%	N	%
RURAL	93,930	50.6	91,732	49.4	1,85,662	100.0
URBAN	9,151	52.0	8,454	48.0	17,605	100.0
TOTAL	1,03,087	50.7	1,00,186	49.3	2,03,267	100.0

(SOURCE : CENSUS OF INDIA, 1981)

The decenial population growth rate (1971-81) for the taluka is 17.8 percent which is much lower than the district and the state as a whole.

There are 280 villages including hamlets and smal. non-revenue villages in the Solur primary centre area. The current population (1983) covered by the PHC is 1,02,889.

2. ORGANISATIONAL STRUCTURE OF PRIMARY HEALTH CENTRE SOLUR

The PHC headquarters are located at Solur, a large village on the main Bangalore-Mangalore/highway. There are 13 sub-centres under the jurisdiction of the PHC. Each sub-centre covers a population of about 5,000 and is looked after by a male and a female health worker. The existing staffing pattern of the PHC is given below:

Source: Office of the District Health & Family Welfare Officer, B'lore District.

TABLE 3.2

STAFFING PATTERN OF PHC SOLUR

	Category of Staff	Sanctioned positions	Positions filled	Positions Vacant
1.	Medical Officer	1	1	-
2.	Lady Medical Officer	1	1	-
3.	Block Health Educator	1	1	-
4.	Clerk (Grade I)	1	1	-
5.	Clerk (Grade II)	1	1	-
6.	Health Assistant (Male)/Senior Health Inspector	3	3	-
7.	Health Assistant (Female)/Lady Health Visitor	3	3	-
8.	Pharmacist	1	1	-
9.	Lab. Tcchnician	1	-	1
10.	Health Worker (Male)	11	6	5
11.	Health Worker (Female)/ Auxiliary Nurse Midwife (ANM)	9	2	7
12.	Attenders	2	2	-
13.	Ayah	1	-	1
	TOTAL	36	22	14

In addition to the facilities for out-door patients, the PHC has six beds for obstetrical and other emergency patients, but are rarely made use of by the people.

TABLE 3.3

DISTRIBUTION OF SAMPLE POPULATION BY AGE AND SEX

Age groups	MALE		FEMALE		TOTAL	
	N	%	N	%	N	%
Below - I year	39	3.2	39	3.3	78	3.3
1 - 2 years	25	2.0	14	1.2	39	1.6
3 - 4 years	100	8.2	93	8.0	193	8.1
5 - 14 years	323	26.4	290	24.9	613	25.7
15 - 24 years	229	18.7	217	18.6	446	18.7
25 - 34 years	137	11.2	166	14.2	303	12.7
35 - 49 years	168	13.7	148	12.7	316	13.2
50 - 64 years	119	9.7	137	11.8	256	10.7
65 +	82	6.7	61	5.2	143	6.0
TOTAL	1222	100.0	1165	100.0	2387	100.0

3.3 PRIMARY HEALTH UNITS

In the Solur PHC area there are four primary health units (PHUs) located at Kudur, Sankighatta, Gudemaranahalli and Marur Villages. Each health unit is supposed to cover a population of 15,000. These primary health units are typical of Karnataka state only and provide mainly curative services. Each PHU is staffed by a medical officer, a pharmacist, an ANM and 2 attenders.

.....35

3.4 AGE AND SEX DISTRIBUTION OF POPULATION

Age and sex distribution of population is the most important measure for determining health needs of the community. The data on age and sex composition of family members, as will be demonstrated below, can form a basis for finding out number of married women in the reproductive age groups, the number of pre-school children and other groups with age and sex specific health needs. By looking at the age and sex composition of the population one can also roughly know the other demographic characteristics of the population such as level of fertility and mortality. The age and sex distribution of the study population is shown in table 3.3. The table shows that 38.7% of the population is below 14 years and those above the age of 50 constitute only 16.7% of the total population. Thus our study population is characterised by high proportion of infants and children and a low proportion of people living beyond the middle age which is typical of a developing country where both fertility and mortality levels are high.

3.5 POPULATION DISTRIBUTION AS BASIS FOR NEED DETERMINATION

The data given in table 3.3 has been projected to a hypothetical PHC base of 1,00,000 and is shown in table 3.4. This table reflects many of the health needs specific to particular age and sex groups. To give an illustration, if professionals decide that a child requires check ups every

.....36

two months during infancy and biannual visits thereafter until he/she reaches the age of five, 39,046 contacts would be needed every year in the hypothetical PHC area. Similar examples could be extended to other age groups.

TABLE 3.4

POPULATION DISTRIBUTION AS BASIS FOR NEED DETERMINATION

Persons	Survey Results	Extrapolated to population 1,00,000 (PHC population)
Under 1 year	78	3268
1 - 4 years	232	9719
5-14 years	613	25680
15-49 years	534	22245
50 and above	399	16715
Total	2387	100,000
Eligible women (currently married women between the ages of 15-49)	374	15668

3.6 LEVEL OF LITERACY

The level of literacy is an important determinant of health care attitudes and practices, as well as receptivity to change. The sexwise distribution of population by education is shown in table 3.5 which indicates that a little

.....37

more than half (51.7%) of the study population is either literate or have had some formal schooling. The table further shows that while 62.1% of the males are literate or had some schooling, the corresponding figure for the females works out to be 37.8 percent. The literacy rate in Magadi taluka, according to the 1981 census, is 32.5% for the total population and 44.0% and 20.6% for males and females respectively. Thus the literacy rate in the sample population is higher than the taluka as a whole

TABLE 3.5

DISTRIBUTION OF POPULATION BY EDUCATION ACCORDING TO SEX

Educational Status	MALE N	%	FEMALE N	%	TOTAL N	%
Illiterate	427	34.9	725	62.2	1152	48.
Literate	138	11.3	83	7.1	221	9.3
Primary	240	19.6	164	14.1	404	16.9
Middle	128	10.5	80	6.9	208	8.7
Higher Secondary	223	18.3	105	9.0	328	13.7
College Education	66	5.4	8	0.7	74	3.1
TOTAL	1222	100.0	1165	100.0	2387	100.0

.....38

3.7 DEPENDENCY STATUS

The dependency status of both male and female population in our sample is shown in table 3.6. It could be seen from this table that 59.5% of the population is not working and are dependent on the working population for their maintenance. The percentage of non-workers among males and females works out to be 46.7 and 70.9 respectively. The dependency rate among the study population is thus very high which is typical of a high fertility developing society.

TABLE 3.6

DISTRIBUTION OF WORKER AND NON WORKER POPULATION ACCORDING TO SEX

	Persons		Male		Female	
	N	%	N	%	N	%
Workers	990	41.5	651	53.3	339	29.1
Non-Workers	1397	59.5	571	46.7	826	70.9
TOTAL	2387	100.0	1222	100.0	1165	100.0

3.8 TYPES OF ECONOMIC ACTIVITY OF WORKING FORCE

The main economic activity of the working force in the study area is agriculture in which approximately three-fourths (74.2%) of the working population is engaged. Approximately half (48.9%) the workers are owner cultivators, while about

.....39

one-fourth (25.3%) are landless agricultural labourers. The other activities in which the working force is engaged in order of their numerical importance are service/teacher (9.7%) household industry (7.6%) commerce/shopkeeper (6.7%) and others including village artisans (1.9%). The sexwise distribution of the working force shows that a large number (40.1%) work as agricultural labourers. The details are given in table 3.7.

TABLE 3.7

DISTRIBUTION OF WOPK FORCE ACCORDING TO MAIN ECONOMIC ACTIVITY

Occupation	Persons		Male		Female	
	N	%	N	%	N	%
Cultivator	484	48.9	328	50.4	156	46.0
Agricultural labourer	250	25.3	114	17.5	136	40.1
Household industry	75	7.6	50	7.7	25	7.4
Service/teacher	96	9.7	93	14.3	3	0.9
Commerce/shopkeeper	66	6.7	51	7.8	15	4.4
Caste occupation	13	1.3	10	1.5	3	0.9
Others	6	0.6	5	0.8	1	0.3
TOTAL	990	100.0	651	100.0	339	100.0

.....40

TABLE 3.8

SIZE OF LAND HOLDINGS ACCORDING TO TYPE OF VILLAGE

Type of villages	Total No. of HHs	Extent of land held													
		Nil		Less than 1 acre		1-2		3-4		5-9		10+		DK*	
		N	%	N	%	N	%	N	%	N	%	N	%	N	% %
PHC Hq.	50	12.5	23	(18.5)	10	(21.7)	7	(7.9)	3	(4.5)	2	(4.6)	1	(6.7)	4 (25.0)
PHC villages	50	12.5	4	(3.2)	8	(17.4)	12	(13.5)	12	(17.9)	11	(25.6)	2	(13.3)	1 (6.2)
PHU villages	100	25.0	57	(46.0)	12	(26.1)	12	(13.5)	9	(13.4)	5	(11.6)	3	(20.0)	2 (12.5)
SC villages	100	25.0	22	(17.7)	7	(15.2)	31	(34.8)	20	(29.9)	11	(25.6)	5	(33.3)	4 (25.0)
Remote villages	100	25.0	18	(14.5)	9	(19.6)	27	(30.3)	23	(34.3)	14	(32.6)	4	(26.7)	5 (31.3)
Total	400	(100)	124	(100.0)	46	(100.0)	89	(100.0)	67	(100.0)	43	(100.0)	15	(100.0)	16 (100.0)
% to total no. of HHs	100.0		31.0		11.5		22.2		16.7		10.8		3.8		4.0

*DK - Do not know.

.....41

3.9 SIZE OF LAND HOLDINGS

The distribution of land owned by the sampled households in different types of village is shown in table 3.8. Approximately, one thirds(31.0%) of the households do not own any land and another one-thirds(33.1%) own less than 2 acres. Those owning more than 5 acres constitute only about one-sixth of the households. There are considerable variations according to the type of village but no clear pattern is discernible.

3.10 MARITAL STATUS

The marital status of the study population is shown in table 3.9. A little more than half (53.8%) of the persons included in our sample are in the never married status, another two-fifths(40.0%) are currently married, and the spous of remaining 6.2% are either dead or separated from them.

TABLE 3.9

MARITAL STATUS OF POPULATION

Marital Status	N	%
Unmarried	1285	53.8
Married	955	40.0
Widow/Widower	140	5.9
Divorced/Separated	7	0.3
TOTAL	2387	100.0

3.11 DISTRIBUTION OF HOUSEHOLDS BY RELIGION

An overwhelming majority (92.0%) of households belong to the Hindu religion and the remaining 8% of the households are equally distributed among the Muslims and Christians. It could be further seen from table 3.10 that Muslims and Christians are primarily concentrated in the PHC headquarter village and their number is negligible in other villages.

3.12 DISTRIBUTION OF HINDU HOUSEHOLDS BY CASTE

The major castes in this study area, according to their numerical strength are Vokkaliga (34.8%) Kuruba/Golla (15.5%), and Lingayath (14.9%). The scheduled castes/tribes constitute one-eighth (12.5%) of the total number of Hindu households. The caste distribution however varies according to the type of villages. For example, in the village where PHC is located 48.4% of the Hindu household are Kuruba/Golla and 45.1% belong to scheduled castes/tribes. The Lingayaths constitute only 6.5% of the total number of Hindu households. The caste distribution according to the type of villages included in our sample can be seen from table 3.11.

.....43

TABLE 3.10

DISTRIBUTION OF HOUSEHOLDS ACCORDING TO RELIGION AND TYPE OF VILLAGE

Religion	Total No. of HHs.		Type of Village									
			PHC HQrs		PHC Villages		PHU Villages		SC Villages		Remote Villages	
	N	%	N	%	N	%	N	%	N	%	N	%
Hindu	368	92.0	31	62.0	50	100.0	89	89.0	100	100.0	98	98.0
Muslim	16	4.0	9	18.0	-	-	5	5.0	-	-	2	2.0
Christian	16	4.0	10	20.0	-	-	6	6.0	-	-	-	-
TOTAL	400	100.0	50	100.0	50	100.0	100	100.0	100	100.0	100	100.0

.....44

Table 3.11

DISTRIBUTION OF HINDU HOUSEHOLDS ACCORDING TO CASTE AND TYPE OF VILLAGE

Caste	Type of Village											
	PHC HQrs.		PHC Village		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Brahmin	..	-	2	4.0	2	2.2	4	4.0	4	4.1	12	3.3
Lingayath	2	6.5	1	2.0	13	14.6	21	21.0	18	18.4	55	14.9
Vokkaliga	..	..	32	64.0	15	16.8	44	44.0	37	37.8	128	34.8
Kuruba/Golla	15	48.4	-	-	13	14.6	16	16.0	13	13.3	57	15.5
Madivala	..	..	3	6.0	5	5.6	11	11.0	1	1.0	20	5.4
Artisan	-	-	2	4.0	15	16.8	-	-	1	1.0	18	4.9
SC/ST	14	45.1	9	18.0	11	12.4	4	4.0	8	8.1	46	12.5
Others	..	-	1	2.0	15	16.8	-	-	16	16.3	32	8.7
TOTAL	31	100.0	50	100.0	89	100.0	100	100.0	98	100.0	368	100.0

.....45

3.13 SIZE OF HOUSEHOLD BY FAMILY TYPE

The distribution of households according to type and family and size of household is given in table 3.12. All the households have been dichotomised into nuclear and extended. The households which consist of husband, wife and unmarried children are defined as nuclear and all others have been treated as extended for the purpose of this study. The data shows that 54.3% of the households included in our sample are nuclear while the remaining 45.7% are extended households. The average size of nuclear and extended households works out to be 4.7 and 7.5 respectively. The average size of household for the total sample is 5.9. A further analysis of data shows that while approximately two-thirds (65.4%) of the nuclear households have 5 or less persons in the household, three-fourths (75.3%) of the extended families have more than 5 persons.

3.14 POSITIONS IN VILLAGE ORGANISATIONS BY HOUSEHOLD MEMBERS

It is generally said that those who hold positions in village organisations are able to exert their influence with the various health functionaries and are able to obtain quality services for them and their family members from the government health facilities. Furthermore, these formal leaders are considered to be change agents and their cooperation is essential in the identification of health needs and in the implementation of various health programmes. It was therefore considered appropriate to collect information about the individuals in our sample holding positions in the various village organisations. The information collected is shown in table 3.13.

TABLE 3.12

TYPE OF FAMILY ACCORDING TO SIZE OF FAMILY

Type of family	Total No. households		Average Size of HHs	Family Size											
				1		2-3		4-5		6-7		8-9		10+	
	N	%		N	%	N	%	N	%	N	%	N	%	N	%
Nuclear	217	54.3	4.7	14	6.4	49	22.6	79	36.4	55	25.3	17	7.8	3	1.4
Extended	183	45.7	7.5	-	-	7	3.8	38	20.8	55	30.0	41	22.4	42	22.9
TOTAL	400	100.0	5.9	14	3.5	56	14.0	117	29.2	110	27.5	58	14.5	45	11.3

.....4

TABLE 3.13

POSITION HELD IN VILLAGE ORGANISATION BY HOUSEHOLD MEMBERS ACCORDING TO LOCATION

Type of Village	Total No.of households	VP member/ Chairman		Member/Chairman in co-op. society		Member etc. in industrial co-op. society		Others		None	
		N	%	N	%	N	%	N	%	N	%
PHC Headquarters	50	2	4.0	2	4.0	-	-	1	2.0	45	90.0
PHC villages	50	2	4.0	5	10.0	-	-	-	-	43	86.0
PHU villages	100	5	5.0	8	8.0	9	9.0	1	1.0	77	77.0
SC villages	100	8	8.0	2	2.0	-	-	-	-	90	90.0
Remote villages	100	8	8.0	7	7.0	-	-	-	-	85	35.0
TOTAL	400	25	6.3	24	6.0	9	2.2	2	0.5	340	85.0

.....48

A little less than one-sixth of the respondents reported that at least one member of their households has a formal position in a village organization such as Panchayat, cooperative society etc. The data shows that 6.3% of the households included in our study have someone in the family who is the chairman or member of the village Panchayat, and 8.2% of the households have family members who are chairman or members of cooperative societies.

3.15 OUTSIDE CONTACTS

The contacts outside the village are important for assimilating new ideas and for the modification of health behaviour. In order to obtain information about the contacts by the household members outside the village, questions were asked as to where the members go for marketing, recreation etc; whether any member of the household is studying or working outside the village; whether the household owns a radio or transistor; and frequency of reading newspapers and magazines. Table 3.14 shows that about one-third (35.2%) of the persons interviewed indicated that the household members rarely go outside the village for marketing or recreation as all their requirements are met in the village of their residence. Another 45.0% of the respondents reported that for marketing and recreation the family members normally go to places which are located within 10 kilometres from the village; the remaining approximately one-fifths of the respondents indicated that

TABLE 3.14

POINT OF OUTSIDE CONTACT FOR MARKETING, RECREATION ETC. ACCORDING TO TYPE OF VILLAGE

Outside	Type of Village											
	PHC HQrs.		PHC Villages		PHV Villages		SC Villages		Remote Villages			
	N	%	N	%	N	%	N	%	N	%	N	%
Available at place of residence	29	(58.0)	6	(12.0)	71	(71.0)	26	(26.0)	9	(9.0)	141	(35.2)
Within 10 Kms. of residence	19	(38.0)	43	(86.0)	2	(2.0)	70	(70.0)	46	(46.0)	180	(45.0)
More than 10 Kms. of residence	-	-	-	-	4	(4.0)	-	-	41	(41.0)	45	(11.2)
Taluka Hqrs.	-	-	-	-	1	(1.0)	-	-	-	-	1	(0.3)
Bangalore	2	(4.0)	-	-	19	19.0	4	(4.0)	2	(2.0)	27	(6.7)
Others	-	-	1	(2.0)	3	(3.0)	-	-	2	(2.0)	6	(1.5)
TOTAL	50	(100.0)	50	(100.0)	100	(100.0)		(100.0)	100	(100.0)	400	(100.0)

.....50

for this purpose they either go to places which are beyond 10 kilometres from their place of residence or to taluka or district headquarters. A break up of this information according to the type of village reveals that while an overwhelming majority of those residing in the villages where PHC or PHUs are located meet their requirements in the village itself; more than nine-tenth of those belonging to remote villages go out of the village for marketing purposes or recreation. This is because the villages where PHC or PHU's are located are relatively much larger as compared to those villages which lack such facilities.

3.16 HOUSEHOLD MEMBERS WORKING AND STUDYING OUTSIDE THE VILLAGE

The people from the rural areas who work or study outside the village in the towns and cities generally make frequent visits to their respective villages and often bring new ideas. Many a times they are instrumental in changing the health practices of their family members. All respondents were therefore asked if any household member is working or studying outside the village. The information thus elicited is shown in table 3.15 which reveals that more than one-third (36.5%) have at least one member of their family who, at the time of the survey, was working or studying outside the villages of his permanent residence.

2810
RS-154

.....51

TABLE 3.15

HOUSEHOLDS HAVING MEMBERS STUDYING OR WORKING OUTSIDE THE VILLAGE

Type of Village	Total No. of HHs	No. of HHs having members working outside the village	Percentage to total No. of Households
PHC HQrs.	50	17	34.0
PHC Villages	50	23	46.0
PHC Villages	100	32	32.0
SC Villages	100	29	29.0
Remote Villages	100	45	45.0
	400	146	36.5

3.17 OWNERSHIP OF RADIO/TRANSISTOR

Since radio is an important media for communicating new ideas, the matter of contact outside the village was further pursued by asking the respondents if they own a radio or transistor. Approximately one-third (34.8%) of the respondents reported that they own a transistor or radio. The percentage of households owning radios/transistors in the PHC and PHU headquarter villages was found to be 40 and 45 respectively. (Table 3.16).

.....52

TABLE 3.16

OWNERSHIP OF RADIO/TRANSISTORS BY HOUSEHOLDS AND TYPE OF VILLAGE

Type of Village	No. of HHs.	No. of HHs. owning Radio/ Transistor	Percentage
PHC HQrs.	50	20	40.0
PHC Villages	50	14	28.0
PHU Villages	100	45	45.0
SC Villages	100	30	30.0
Remote Villages	100	30	30.0
TOTAL	400	139	34.8

3.18 NEWSPAPER READING BY HOUSEHOLD MEMBERS

The respondents were further asked if any household members read the newspapers. In case of an affirmative answer. they were further asked if it is done regularly or occasionally. The responses elicited are given in table 3.17 which shows that in more than half (52.7%) of the households no members of the family read the newspaper, in another about one-third (34.8%) at least one member of the household reads newspapers occasionally. The remaining one-eighth (12.5%) of the respondents reported that the household members regularly read the newspapers.

.....53

FREQUENCY OF NEWSPAPER READING BY HOUSEHOLD MEMBERS

TYPE OF VILLAGE

Type of Village	No. of HHs.	Frequency of newspaper reading					
		Regularly		Occasionally		None	
		N	%	N	%	N	%
PHC HQrs.	50	3	6.0	19	38.0	28	56.0
PHC Village	50	2	4.0	17	34.0	31	62.0
PHU Village	100	23	23.0	38	38.0	39	39.0
SC Village	100	13	13.0	29	29.0	58	58.0
Remote Village	100	9	9.0	36	36.0	55	55.0
TOTAL	400	50	12.5	139	34.8	211	52.7

CHAPTER IV

HOUSING AND SANITATION

1. House types
2. Number of rooms
3. Electrification of houses
4. Latrine, bath and kitchen facilities
5. Presence of animals in the houses
6. Source of drinking water
7. Disposal of waste
8. Drainage systems

CHAPTER IV

HOUSING AND SANITATION

IV.1 HOUSE TYPES

The type of house a villager possesses is an important index of his economic condition. An improvement in his economic condition in most cases results in the improvement of his house. This also reflects an important health liability. On the basis of material used in its construction, a house may be divided into three categories:

(a) Pucca

(b) Kuccha

(c) Mixed

A Pucca house is one in the construction of which baked bricks mixed with lime, cement or mud constitute the material of the wall and bricks and wooden lintels or slabs are used for the roof.

In the construction of a Kuccha building unburnt bricks or mud are used for the wall, while straw, wooden lintels or bamboo are the main materials used for the roof.

A mixed house is of two types. Firstly, a structure may be having pucca walls but kuccha roof or a house may be partly pucca or partly kuccha.

.....55

It would be seen from table 4.1 that 73.3% of the houses in our sample are pucca, 25.5 are kuccha and only 1.2% are of mixed type. There is not much variation in the type of house according to the village type except that in the sub-centre villages a little more than half (53.0%) of the houses are kuccha and the remaining 47.0% are pucca.

TABLE 4.1

TYPE OF HOUSING ACCORDING TO TYPE OF VILLAGE

Type of Village	Total No. of HHs.	TYPE OF HOUSING					
		PUCCA		KUCCHA		MIXED	
		N	%	N	%	N	%
PHC Headquarters	50	41	82.0	9	18.0	-	-
PHC Villages	50	47	94.0	1	2.0	2	4.0
PHU Villages	100	79	79.0	20	20.0	1	1.0
SC Villages	100	47	47.0	53	53.0	-	-
Remote Villages	100	79	79.0	19	19.0	2	2.0
TOTAL	400	293	73.3	102	25.5	5	1.2

4.2 NUMBER OF ROOMS

The number of rooms in a house and the average number of persons per room is an important index of over crowding. The distribution of households in our sample according to the number of rooms is given in table 4.2. It could be seen from this table that approximately one-third (34.5%) of the households have only one room accommodation; another one half (50.5%) have between 2-3 rooms. The percentage of households living in more than 3 room houses is very small (15.0%). All the 400 households included in our sample put together have as many as 903 rooms and the average number of rooms per households and the average number of persons per room works out to be 2.3 and 2.7 respec tively.

TABLE 4.2

Number of rooms in the household according to type of village

Type of Village	Total No. of HHs.	Number of rooms in household							
		1 room		2-3 rooms		4-5 rooms		6+	
		N	%	N	%	N	%	N	%
PHC Headquarters	50	16	32.0	26	52.0	6	12.0	2	4.0
PHC Villages	50	9	18.0	32	64.0	5	10.0	4	8.0
PHU Villages	100	30	30.0	45	45.0	18	18.0	7	7.0
SC Villages	100	41	41.0	48	48.0	9	9.0	2	2.0
Remote Villages	100	42	42.0	51	51.0	6	6.0	1	1.0
TOTAL	400	138	34.5	202	50.5	44	11.0	16	4.0

.....57

TABLE 4.3

Provision of Electricity according to type of village

Type of Village	Total No. of HHs.	No.of houses using electricity	%
PHC Headquarters	50	19	38.0
PHC Villages	50	18	36.0
PHU Villages	100	54	54.0
SC Villages	100	34	34.0
Remote Villages	100	6	6.0
TOTAL	400	131	32.8

TABLE 4.4

Use of Latrine according to type of village

Type of Village	Total No.of HHs	No. of HHs having latrine		Type of latrine: pit type		Flush out	
		N	%	N	%	N	%
PHC Headquarters	50	10	20.0	3	30.0	7	70.0
PHC Villages	50	-	-	-	-	-	-
PHU Villages	100	36	36.0	19	52.8	17	47.2
SC Villages	100	2	2.0	2	100.0	-	-
Remote Villages	100	3	3.0	-	-	3	100.0
TOTAL	400	51	12.8	24	47.0	27	53.0

.....58

4.3 ELECTRIFICATION OF HOUSES

All the villages covered by this study are electrified but only about one-third (32.8%) of the households have electric connection in their houses. With regard to the provision of electricity, there are considerable inter-village variations. While 54.0% of the houses in PHU villages are electrified, only 6% of the households in the remote villages have taken electricity connections (Table 4.3).

4.4 LATRINE, BATH AND KITCHEN FACILITIES

Only 51 of the 400 households have latrines in the houses and most of these houses are located in PHC or PHU villages. Further, of these 51 houses, 24 have pit type and remaining 27 flush-out type latrines. In the absence of latrines in the houses, most villagers both males and females, go in the open area in the village for defecation (Table 4.4). Further, approximately one-third (34.5%) of the households have separate bath-rooms. Most of the men, however, take bath in the wells in the fields and women in the improvised bath-rooms in their houses. So far as separate kitchen facilities are concerned, about three-fourths (75.5%) of the respondents indicated that there have separate kitchens in their houses. These separate kitchens are, however, made by putting a small partition wall in the main room.

.....

4.5 PRESENCE OF ANIMALS IN THE HOUSES

A little more than half (57.8%) of the households in our sample possess animals and three-fifths (61.0%) of the households possessing these animals maintain them in the same room occupied by persons (Table 4.5).

TABLE 4.5

Animals' Presence in the Households according to type of Village

Type of Village	Total No.of HHs	No. of households having animals		No. of households where animals live with family members	
		N	%	N	%
PHC HQrs	50	23	46.0	17	73.9
PHV Villages	50	36	72.0	31	86.1
PHU Villages	100	40	40.0	13	32.5
SC Villages	100	73	73.0	42	57.5
Remote Villages	100	59	59.0	38	64.4
	400	231	57.8	141	61.0

.....60

TABLE 4.6

Main Source of Drinking Water according to type of village

Source of drinking Water	PHC Hqrs.		PHC Village		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Borewell	-	-	6	12.0	4	4.0	3	3.0	10	10.0	23	5.7
Well	46	92.0	43	86.0	25	25.0	97	97.0	88	88.0	299	74.7
Tap	4	8.0	-	-	69	69.0	-	-	-	-	73	18.2
Tank/Pond	-	-	-	-	1	1.0	-	-	-	-	1	0.3
Others	-	-	1	2.0	1	1.0	-	-	2	2.0	4	1.0
TOTAL No. of HH's	50	100.0	50	100.0	100	100.0	100	100.0	100	100.0	400	100.0

.....61

4.6 SOURCES OF DRINKING WATER

Since one of the most important potential health hazard is unsafe drinking water, it was considered appropriate to collect data about the main source of drinking water for the household. As could be seen from table 4.6, the source of drinking water for an overwhelming majority (74.7%) of the households are wells. In the PHC and PHU villages, tap water supply is available and in the latter set of villages, it is the main source of drinking water for majority of the households.

.7 DISPOSAL OF WASTE

The disposal of waste has an important consequence to health. An overwhelming majority (85.2%) of the respondents reported that they deposit the household waste in the compost pit; another 12.5% reported random disposal outside the home. Although these are the two main ways of waste disposal, their practice varies from village to village as could be seen from table 4..

4.8 DRAINAGE SYSTEM

About half (49.7%) of the respondents reported that the wastewater from the houses go to lane with working drains. The remaining respondents reported no apparent drainage system (Table 4.8 . The drains wherein they exist do not work during the rainy season. The dirty water often flows from the houses to the streets where, in the absence of no proper diversion is left to dry itself and often emits bad odour.

.....02

TABLE 4.7

Disposal of household refuse according to type of village

Type of disposal	PHC HQrs.		PHC Village		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Road/outside house	19	(38.0)	-	-	29	(29.0)	1	(1.0)	1	(1.0)	50	(12.5
Colmpost pit	29	(58.0)	49	(98.0)	67	(67.0)	99	(99.0	97	(97.0)	341	(85.0
Latrine pit	-	-	-	-	3	(3.0)	-	-	-	-	3	0.7
Others	2	(4.0)	-	-	-	-	-	-	-	-	2	0.5
Can't say	-	-	1	(2.0)	1	(1.0)	-	-	2	(2.0)	4	1.0
Total No. of HHs	50	100.0	50	100.0	100	100.0	100	100.0	100	100.0	400	100.0

.....63

Type of Drains Existing according to type of Village

Type of Drains	PHC Hqrs.		PHC Village		PHU Village		SC Village		Remote Village		Total	
	NN	%	N	%	N	%	N	%	N	%	N	%
To lanes with working drain	14	28.0	29	58.0	59	59.0	59	59.0	38	38.0	199	49.7
NO or inadequatedrains	1	2.0	-	-	-	-	-	-	20	20.0	22	5.2
Directly to pond	-	-	-	-	-	-	-	-	3	3.0	3	0.8
No apparent drainage	35	70.0	20	40.0	37	37.0	40	40.0	37	37.0	169	42.3
Others	-	-	1	2.0	4	4.0	1	1.0	2	2.0	8	2.0
Total No. of HH's	50	100.0	50	100.0	100	100.0	00	100.0	100	100.0	400	100.0

CHAPTER V

AWARENESS AND UTILIZATION OF HEALTH SERVICES

1. Awareness of Primary Health Centre
2. Awareness of Sub-centres
3. Awareness of Primary Health Units
4. Utilization of services at PHC
5. Utilization of SC services
6. Utilization of PHU services
7. Reasons for not using PHC services
8. Reasons for not using SC services
9. Reasons for not using PHU services
10. Use and Community Satisfaction from PHC services
11. Reasons for dissatisfaction from PHC services
12. Use and Community Satisfaction with SC services
13. Reasons for dissatisfaction from SC services
14. Use and Community Satisfaction from PHU services
15. Reasons for dissatisfaction with PHU services
16. Contacts with Government health staff

CHAPTER V

AWARENESS AND UTILIZATION OF HEALTH SERVICES

5.1 AWARENESS OF PRIMARY HEALTH CENTRES

A question was asked from the respondents to find out if they knew the location of PHC in their area. If they did, they were further asked if any member of the household had ever made use of the facilities available at the PHC. In case of an affirmative answer they were asked whether they were satisfied with the services provided.

There was a high degree of awareness among the respondents about the location of PHCs in as much as 91.3% knew about it (Table 5.1). At the village of the PHC headquarters and the village which was located within 5 kilometres of PHC, all the respondents knew about the existence of PHC. However the extent of awareness decreased with the increase in the distance of the village from PHC and only three fourths (76.0%) of the respondents from remote villages knew about the location of PHC.

TABLE 5.1

Awareness of the Community Regarding the Existence of Primary Health Centre

Type of Village	No. of HHs	No. of HHs. showing awareness	Percentage
PHC Headquarters	50	50	100.0
PHC Villages	50	50	100.0
PHU Villages	100	93	93.0
SC Villages	100	96	96.0
Remote Villages	100	76	76.0
TOTAL	400	365	91.3

.....(5

5.2 AWARENESS OF SUB-CENTRES

The information about awareness of sub-centres was sought from the respondents residing in the villages where the sub-centres were located and the villages which were beyond 5 kilometres from PHC i.e. remote village.

All the respondents living in the villages where sub-centres were located knew about the existence of sub-centre while only 78% of those living in remote villages had some knowledge about the sub-centres in their area. (Table 5.2).

TABLE 5.2

Awareness of community regarding the existency of sub-centres

Type of Village	Total No. of HHs	No. showing awareness	%
SC Villages	100	100	100.0
Remote Villages	100	78	78.0
TOTAL	200	178	89.0

5.3 AWARENESS OF PRIMARY HEALTH UNITS

A PHU is supposed to serve a population of 15000. The question about the existence of PHUs was asked from the respondents from the villages where PHUs and sub-centres were located and those villages which were not within the effective range (5 kilometres) of PHC. All the respondents from the

.....66

PHU and SC village were able to specify the existence and location of PHU, while 89.0% of the respondents from the remote villages could do so. (Table 5.3).

TABLE 5.3

Awareness of community regarding existence of PHUs

Type of Village	No. of HHs	No. showing awareness	%
PHU Villages	100	100	100.0
SC Villages	100	100	100.0
Remote Villages	100	89	89.0
TOTAL	300	289	96.30

5.4 UTILIZATION OF SERVICES AT THE PRIMARY HEALTH CENTRE

Approximately two-thirds (62.5%) of the respondents interviewed reported that they and/or their family members had utilised the services available at the PHC at one time or the other. A further break up of the responses by type of village shows that while 96% and 94% of the respondents and/or their family members from the village where the PHC is located and/village within 5 kilometres of PHC headquarters respectively had utilised the PHC services; the use of PHC services from the PHU, SC and remote villages was 54.0%, 52.0% and 49.0% respectively. (Table 5.4)

.....67

TABLE 5.4

Utilization of services available at the PHC by Community type of Villages

Type of Villages	Total No. of responses	No. using services	%
PHC Headquarters	50	48	96.0
PHC Villages	50	47	94.0
PHU Villages	100	54	54.0
SC Villages	100	52	52.0
Remote Villages	100	49	49.0
TOTAL	400	250	62.5

5.5 UTILIZATION OF SUB-CENTRE SERVICES

The use of sub-centre services by and large was limited to those living in the sub-centre villages and in these villages about three-fourths (59.0%) of the respondents and/or their families reported to have ever utilised the SC services. The utilization of SC services from the remote villages has been found to be negligible (6.0 percent). (Table 5.5).

TABLE 5.5

Utilization of services available at SCs by the community

Type of Village	Total No. of HHs	No. using services	Percentage
SC Village	100	59	59.0
Remote Village	100	6	6.0
TOTAL	200	65	32.5

5.6 UTILIZATION OF PRIMARY HEALTH UNIT SERVICES

Three-fourths (75.0%) of the respondents from the villages where PHU were located reported that they and/or their family members had availed of PHU services at one time or the other. The reported utilization of PHU services from the SC and remote villages works out to be 61.0 and 60.0 percent respectively. (Table 5.6).

TABLE 5.6

Utilization of service available at PHUs by people

Type of Village	Total No. of HHs	No. using services	%
PHU Villages	100	75	75.0
SC Villages	100	61	61.0
Remote Villages	100	60	60.0
TOTAL	300	196	65.3

5.7 REASONS FOR NOT UTILIZING PRIMARY HEALTH CENTRE SERVICES

The respondents who or their family members who had never availed of the PHC services were asked to state reasons for having not used these services. The reasons given by the respondents are shown in table 5.7. The most important reasons mentioned by the respondents in order of their numerical importance are : accessibility (32.7%), availability of better services elsewhere (30.0%), there was no need (21.3%). (Table 5.7).

.....69

TABLE 5.7

Reasons for not using Primary Health Centre services as given by people according to type of Village

No. of HHs not using PHC sources	PHC Hqrs.		PHC Village		PHU Villages		SC Villages		Remote Villages		Total	
	2		3		46		48		51		150	
	N	%	N	%	N	%	N	%	N	%	N	%
Reasons for not using PHC												
They demand money	-	-	-	-	3	(6.5)	3	(6.3)	2	3.9	8	5.3
Better Service elsewhere	2	100.0	1	33.3	24	(52.2)	11	(22.9)	7	13.7	45	30.0
No illness	-	-	1	33.3	11	(23.9)	11	(22.9)	9	17.6	32	21.3
Too far/no transport	-	-	-	-	3	(6.5)	19	(39.6)	27	52.9	49	32.7
Do not know any one at PHC	-	-	-	-	2	(4.4)	-	-	-	-	2	1.3
Too old	-	-	1	33.3	1	(2.2)	3	6.3	-	-	5	3.3
Not ascertained	-	-	-	-	2	(4.4)	1	2.1	6	11.8	9	6.0

..... 70

5.8 REASONS FOR NOT UTILIZING SUB-CENTRE SERVICES

Those residing in the villages where sub-centres were located and who had never used the services of these centres indicated that the main reason for their not using these services was non-availability of qualified doctor at the sub-centres. This reason was given by 87.8% of the respondents. Two-thirds (66.0%) of the respondents from the remote villages however gave distance from the sub-centre as the primary reason for not using SC services. (Table 5.8).

TABLE 5.8

Reasons for not using sub-centre services as indicated by people according to type of village

No. of HHs not using SC facilities	SC Villages		Remote Villages		Total	
	41		94		35	
	N	%	N	%	N	%
Reasons for not using SC services						
Non availability of qualified doctor	36	87.8	6	6.4	42	31.1
Too far	1	2.4	62	66.0	63	46.7
Staff not polite	-	-	9	9.6	9	6.7
They demand money	1	2.4	-	-	1	0.7
No illness	2	4.9	1	1.1	3	2.2
Others	1	2.4	5	5.3	6	4.4
NA	-	-	11	11.7	11	8.1

.....71

5.9 REASONS FOR NOT USING PHU SERVICES

A little more than half (56.0%) of the respondents from the PHU headquarter villages who and/or their family members had never utilized the services available at PHU indicated that they or their family members had never visited the PHU because relatively better facilities are available elsewhere. Another one-sixths (16.0%) reported that the health personnel at these facilities demand money for the services provided by them. Availability of better facilities elsewhere as the reason was also given by about half the respondents from SC headquarter and remote villages. Another important reason given by the respondents from remote villages was inaccessibility. (Table 5.9).

TABLE 5.9

Reasons for not using PHU villages as indicated by people

No. of HHs not using PHC services	PHU Villages		SC Villages		Remote Villages		Total	
	25		39		40		104	
	N	%	N	%	N	%	N	%
Reasons for not using PHU services								
No illness	-	-	4	10.3	6	15.0	10	9.6
Staff are irregular	-	-	2	5.1	1	2.5	3	2.9
Too far/no transport	2	8.0	2	5.1	7	17.5	11	10.6
Better treatment elsewhere	14	56.0	20	51.3	13	32.5	47	45.2
They demand money	4	16.0	6	15.4	-	-	10	9.6
Others	4	16.0	5	12.8	4	10.0	13	12.5
NA	1	4.0	-	-	9	22.5	10	9.6

.....72

5.10 USE AND COMMUNITY SATISFACTION FROM PHC SERVICES

The general satisfaction of the respondents with the services received at the PHC was reported to be very high (96.4%). The degree of satisfaction was more or less same in all the villages and no significant differences were found according to the type of village (Table 5.10).

TABLE 5.10

Use and community satisfaction of PHC services

Type of Village	No. using PHC services	No. satisfied with services	%
PHC Headquarters	48	46	95.8
PHC Villages	47	45	95.7
PHU Villages	54	52	96.3
SC Villages	52	51	98.1
Remote Villages	49	47	95.9
TOTAL	250	241	96.4

5.11 REASONS FOR DISSATISFACTION FROM PHC SERVICES

Out of 9 respondents who reported dissatisfaction from PHC service, 6 stated tne reason for dissatisfaction as non-dispensation of good drugs, 2 indicated impersonal behaviour of the PHC staff as the reason and the remaining respondents mentioned that the staff at PHC demand money for the services provided. (Table 5.11).

.....73

TABLE 5.11

Reasons for dissatisfaction from PHC services

No. of persons dissatisfied	Total : 9	
Reasons for dissatisfaction	No. dissatisfied	Percentage
They do not give good drugs	6	66.7
They demand money	1	11.1
Not hospitable	2	22.2

5.12 USE AND COMMUNITY SATISFACTION WITH THE SUB-CENTRE SERVICES

Out of 67 respondents who and/or their family members had ever used SC services, 63 (94.0%) indicated that they were on the whole satisfied with the services provided at these facilities. However, as compared to the villages where the sub-centres are located the degree of satisfaction was much less in the remote villages. It is because the expectations of those who go to sub-centres from distant villages are relatively high. (Table 5.12).

TABLE 5.12

Use and community satisfaction with sub-centre services

Type of Village	No. of HHs using SC services	No. satisfied	Percentage
SC Villages	61	60	98.4
Remote Villages	6	3	50.0
TOTAL	67	63	94.0

.....74

5.13 REASONS FOR DISSATISFACTION FROM SUB-CENTRE SERVICES

The lone respondent from sub-centre village who reported dissatisfaction indicated that the sub-centre staff demand money for the services. The 3 respondents from remote villages who were dissatisfied with the sub-centre services pointed out that the quality of services provided by the nurse at the sub-centre is very poor. (Table 5.13).

TABLE 5.13

Reasons for dissatisfaction from sub-centres

	SC Villages		Remote Villages	
	1		3	
Reasons for dissatisfaction	N	%	N	%
They demand money	1	100.0	-	-
Poor quality of services	-		3	100.0

5.14 USE AND COMMUNITY SATISFACTION FROM PRIMARY HEALTH UNIT SERVICES

The degree of satisfaction from PHU services reported by the respondents was very high (94.4%). In this connection no significant differences were observed in the responses from the PHU, SC, and remote villages. (Table 5.14).

.....75

TABLE 5.14

Use and community satisfaction with PHU services

Type of Village	No. using PHU sources	No. satisfied	%
PHU Villages	75	70	93.3
SC Villages	61	58	95.1
Remote Villages	60	57	95.0
TOTAL	196	185	94.4

5.15 REASONS FOR DISSATISFACTION WITH PHU SERVICES

The main reasons given by those who reported dissatisfaction with the PHU services are: the staff at PHU do not take proper care; the staff demand money for the services provided. (Table 5.15).

TABLE 5.15

Reasons for dissatisfaction with PHU services

Reasons for dissatisfaction	PHU Villages		SC Villages		Remote Villages	
	5		3		3	
	N	%	N	%	N	%
Proper care not taken	2	40.0	2	66.7	-	-
They demand money		40.0	1	33.3	3	100.0
Other reasons	1	20.0	-	-	-	-

.....76

5.16 CONTACTS WITH GOVERNMENT HEALTH FUNCTIONARIES

The government health workers are supposed to visit each home in their jurisdiction at least once in a month to provide essential primary health care services. A knowledge of the distribution of community contacts for various purposes is important to determine the type of services actually reaching the community. A question was therefore asked from all the respondents whether any professional services had been received and whether the health workers provided the specified professional help during the preceding two weeks. It can be seen from table 5.16 that help regarding malaria could reach fewer than one-thirds (31.5%) of the households. The other help which was received by about one-sixths (14.7%) of the total number of households in the sample was with regard to sanitation. This was however mainly confined to the PHC headquarter village and the village and the villages within 5 kilometres from the PHC. The proportion of respondents having received other services such as vaccination, maternal and child health care, family planning etc. was almost negligible. Further, no health worker/reportedly asked the household members about the occurance of births and deaths in the family. (Table 5.16).

.....77

TABLE 5.16

Number of households reporting contacts by health staff, according to type of village

Type of Health contacts	Type of Village											
	PHC HQrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Vaccination	2	4.0	-	-	3	3.0	-	-	2	2.0	7	1.7
Malaria	-	-	10	20.0	42	42.0	44	44.0	30	30.0	126	31.5
Sanitation	37	74.0	10	20.0	5	5.0	6	6.0	1	1.0	59	14.7
Dog/Rat destruction	-	-	-	-	-	-	-	-	-	-	-	-
Child care	-	-	-	-	7	7.0	5	5.0	-	-	12	3.0
Woman and maturity	-	-	-	-	2	2.0	-	-	-	-	2	0.5
Family Planning	-	-	-	-	2	2.0	-	-	-	-	2	0.5
Births and deaths Registration	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-

Note : Positive responses only.

CHAPTER V

INDIVIDUAL HEALTH PROBLEMS AND ACTIONS

1. Immunization Status
2. Disabling Conditions
3. Illness Episodes in the households
4. Type of Illness Episodes
5. Distribution of Illness Episodes according to age
6. Sex Distribution of Illness Episodes
7. Morbidity Incidence and Prevalence rates
8. Professional Consultation
9. Professional Consultation by number of symptoms
10. Professional Consultation by duration of illness
11. Type of practitioner consulted
12. Type of practitioner consulted by duration of illness
13. Location of practitioners consulted
14. Reasons for selecting practitioner
15. Number of visits to practitioner
16. Patients' escort to practitioner
17. Proxy visits to practitioner
18. Home visits by practitioner
19. Distance travelled by patients
20. Mode of travel to practitioner
21. Travel time to practitioner
22. Consultation content
23. Medical costs incurred by patients
24. Mode of payment
25. Time lost from normal activities due to illness

CHAPTER VI

INDIVIDUAL HEALTH PROBLEMS AND ACTIONS

6.1 IMMUNIZATION STATUS

An attempt was made to ascertain the level of protection through vaccination of each household member. The data shows that 92.9 percent of the population in our sample reported to have had small pox vaccination. Another 2.2 percent were uncertain and 4.8 percent never had the protection against small pox. An overwhelming majority (72.1%) of the population was reported to be immunized against small pox four or more years prior to the date of investigation. The respondents were also asked if they or their family members had ever been immunized against tuberculosis. Almost all (97.1%) the respondents answered in the negative. As regards immunization against diseases otner than small pox and tuberculosis, a little more than hali (56.5%) of the respondents reported that they and/or their family members never had any other immunization and another two-fifths (40.4 percent) could not give a specific answer. (Table 6.1).

.....79

TABLE 6.1

IMMUNIZATION OF STATUS OF POPULATION

Year of Immunization	Small Pox		BCG		Others	
	N	%	N	%	N	%
Less than 1 year	16	0.7	2	0.1	1	0.04
1 year	52	2.2	-	-	-	-
2 years	50	2.1	2	0.1	1	0.04
3 years	62	2.6	2	0.1	-	-
4 years and more	1721	72.1	5	0.2	-	-
Uncertain when	316	13.2	26	1.1	33	1.40
Uncertain if they had	52	2.2	8	0.3	39	1.63
Never	114	4.8	2318	97.1	1349	56.51
NA	4	0.2	24	1.0	964	40.38
Total	2387	100.0	2387	100.0	2387	100.0

6.2 DISABLING CONDITIONS

Since there is a need for special services for chronically disabled persons, questions were asked in our survey about the presence of any disabling conditions among the household members, such as vision, hearing or speech impairment; hand or leg limitations; impairment of spine; epilepsy; mental illnesses etc. The analysis reveals that 4.4 percent of the population is suffering from one or the other above mentioned disabilities. The most common disability reported was poor vision mainly among those above the age of 50 years. However, only 13 cases of limitation of the extremities; and 4 cases of epilepsy or mental retardation were reported. (Table 6.2).

TABLE 6.2

CHRONICALLY DISABLED/ILL PERSONS BY TYPE OF DISABILITY AND AGE GROUPS AND SEX

Type of disability	Less than 4 years		5-14 yrs		15-24 yrs		25-34 yrs		35-49 yrs		50-64 yrs		65+yrs		Total		Grand Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Poor vision	-	-	-	-	-	-	2	-	-	1	6	15	17	14	25	30	55
Poor vision + poor hearing	-	-	-	-	-	-	1	-	-	1	-	-	2	7	3	8	11
Blind	1	-	1	-	-	-	-	-	1	-	-	-	-	1	3	1	4
Poor hearing	-	-	-	-	-	-	-	-	1	-	1	1	1	-	3	1	4
Missing Legs/Arms	-	-	-	1	-	-	-	-	-	-	-	-	-	-		1	1
Crippled legs	-	-	2	-	1	-	1	-	1	1	1	-	-	-	6	1	7
Paralysis/Stroke	-	-	-	-	-	-	-	-	-	2	1	-	2	-	3	2	5
Asthma	-	-	-	-	-	-	-	-	1	2	2	-	3	-	6	2	8
Cancer	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1
Fits/Epilepsy	-	-	-	-	-	-	1	1	-	1	-	-	-	-	1	2	3
Mental Retardation	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	1
Arthiritis	-	-	-	-	-	-	-	-	1	-	-	1	-	-	1	1	2
Leprosy	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	1
Others*	-	-	-	-	-	-	-	-	-	-	1	1	1	-	2	1	3
Total	1	-	3	1	1	-	5	1	5	8	13	19	26	23	54	52	106

*Oedema/Gastric etc.

6.3 ILLNESS EPISODES IN THE HOUSEHOLDS

Information was solicited from the respondents about any illnesses in the family during a period of 2 weeks prior to the date of investigations, along with the source and cost of treatment, if any. Many studies have found that recall period for acute episodes should not be more than 2 weeks and hence this period was used in this study. However, a study using a few weeks recall period is hardly sufficient to obtain a comprehensive view of the dynamics of medical care seeking in case of long duration illnesses. Furthermore, a one time study like this can not account for seasonal variations in illness episodes. For this a longitudinal study, covering at least a period of one year, is needed.

The number of illness episodes reported by the households is shown in table 6.3, which indicates that in approximately one-thirds (36.0%) of the households at least one illness episode was reported during the reference period of two weeks. The proportion of households reporting illness episodes was highest in the PHC headquarter village and lowest in the remote villages. (Table 6.3).

.....82

TABLE 6.3

NUMBER OF HOUSEHOLDS REPORTING ILLNESS CASES BY TYPE OF VILLAGE

No. of persons ill during 15 days prior to investigation	PHC HQ.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None	19	38.0	33	66.0	58	58.0	70	70.0	76	76.0	256	64.0
1 - 2	28	56.0	17	34.0	38	38.0	29	29.0	24	24.0	136	34.0
3 - 4	3	6.0	-	-	3	3.0	1	1.0	-	-	7	1.7
5 +	-	-	-	-	1	1.0	-	-	-	-	1	0.3
Total	50	100.0	50	100.0	100	100.0	100	100.0	100	100.0	400	100.0

.....83

6.4 TYPE OF ILLNESS EPISODES

The complaints mentioned by the respondents were recorded in verbatim in the local language by the interviewers and later translated into English and coded according to the International Classification of Diseases. At the stage of analysis the codes were transformed into a condensed list of 30 specific categories and then into 12 broad categories indicated in Table 6.4.

(Table 6.4 on page 84)

The frequency distribution of episodes according to 12 broad categories is shown in table 6.5 which reveals that the most common illnesses found were of infective and parasitic nature and accounted for 30.5 percent of the total complaints. The next in order of numerical importance were complaints related to circulatory and respiratory systems (22.1%), digestive system (14.2%) musculo-skeletal and connective tissues (9.5%), skin and subcutaneous tissues (8.9%), mental, nervous system and sense organs (6.8%). The incidence of other complaints was only marginal. A slight variation was observed in the pattern of diseases according to the type of village. For instance, in the PHC headquarter village illnesses related to circulatory and respiratory systems had the highest incidence and next in order were complaints which fall into the broad category of infective and parasitic.

.....84

TABLE 6.4

30 SELECTED SPECIFIC
AND 12 BROAD CATEGORIES OF DIAGNOSIS

Selected Specific Categories	Broad Categories
1. Diarrhoea 2. Unrelated Fevers 3. Other Infectious and Parasitic	I. Infective and parasitic
4. Nutritional Deficiencies 5. Anemia 6. Other Blood	II. Nutritional and Blood
7. Mental Illness 8. Unrelated Headache 9. Inflammatory Eye 10. Other Eye 11. Inflammatory Ear 12. Other Nervous System and Sense Organs	III. Mental, Nervous System, Sense Organs
13. Common Cold 14. Unrelated Cough 15. Pulmonary (Lower Respiratory) 16. Other Specific Respiratory 17. Specific Circulatory 18. Combined Unrelated Circulatory-Respiratory	IV. Circulatory and Respiratory System
19. Oral (Mouth, Teeth, Gums) 20. Abdominal, G.I., Other Digestive	V. Digestive System
21. Female 22. Other Genitourinary	VI. Genitourinary System
23. Boils, Skin Infection 24. Other Skin	VII. Skin, Subcutaneous Tissues
25. Unrelated Bodyache, Musculo-Skeletal	VIII. Musculo-Skeletal and Connective Tissues

TABLE 6.4
(Continued)

Selected Specific Categories	Broad Categories
26. Superficial Injury, Contusions 27. Other Injury	IX. Accidents, Poisoning, Violence
28. Normal Care: Maternity, Well Child, Family Planning	X. Normal Care
29. Unrelated Ill-Defined Conditions, Other	XI. Ill-Defined, Others
30. Unknown, Not Ascertained	XII. Not Ascertained

Source : The Johns Hopkins University: "The Funactional Analysis of Health Needs and Services" - Asia Publishing House, New York, 1976, pp.84.

6.5 DISTRIBUTION OF ILLNESS EPISODES ACCORDING TO AGE

The age distribution of persons for wh om illness episodes had been reported is given in table 6.6. A little more than one-fifths (21.5%) of the episodes were reported for the persons below the age of 5 years, who constitute about one-eights (13.0%) of the total population. Similarly the persons above the age of 50 who comprise one-sixths (16.7%) of the total population reported about one-fourths (25.2%) of the total illness episodes. The remaining 53.0 percent of the affected persons were in the age group 5-49 whose percentage in the total population works out to be 70.3. Thus, the proportion of illness episodes reported for younger children and older persons was much higher than their numerical strength in the total population. (Table 6.6).

.....86

TABLE 6.5

Diagnostic categories of illness episodes by type of village

Diagnostic Categories	P.H.C.Hqrs.		P.H.C.V.		P.H.U.V.		S.C.V.		R.V.		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
1. Infective and Parasitic	8	17.4	7	38.9	24	36.9	10	29.4	9	33.3	58	30.5
2. Nutritional and Blood	-	-	-	-	2	3.1	-	-	-	-	2	1.1
3. Mental, Nervous System and Sense Organs	3	6.5	2	11.1	3	4-6	2	5.9	3	11.1	13	6.8
4. Circulatory and Respiratory System	15	32.6	2	11.1	20	30.8	5	14.7	-	-	42	22.1
5. Digestive System	9	19.6	2	11.1	8	12.3	7	20.6	1	3.7	27	14.2
6. Genitourinary System	-	-	-	-	1	1.5	2	5.9	1	3.7	4	2.1
7. Skin, Subcutaneous Tissues	4	8.7	3	16.7	-	-	3	8.8	7	25.9	17	8.9
8. Musculo-Skeletal and Connective Tissues	6	13.0	1	5.6	3	4.6	4	11.8	4	14.8	18	9.5
9. Accidents, Poisoning & Violence	1	2.2	1	5.5	4	6.2	1	2.9	2	7.4	9	4.7
Total	46	100.0	18	100.0	65	100.0	34	100.0	27	100.0	190	100.0

PHCV : PHC Villages
PHUV : PHU Villages
SCV : SC Villages
RV : Remote Villages

TABLE 6.6

Distribution of illness episodes by type of villages

Age groups	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Less than 1 year	2	4.3	-	-	4	6.4	2	5.4	1	3.7	9	4.7
1 year	3	6.5	-	-	4	6.4	1	2.7	1	3.7	9	4.7
2-4 years	6	13.0	2	11.1	8	12.9	5	13.5	2	7.4	23	12.1
5-14 years	7	15.2	2	11.1	14	22.6	3	8.1	3	11.1	29	15.2
15-24 years	4	8.7	2	11.1	6	9.7	4	10.8	4	14.8	20	10.5
25-34 years	5	10.9	1	5.5	6	9.7	1	2.7	7	25.9	20	10.5
35-49 years	8	17.4	5	27.8	9	14.5	6	16.2	4	14.8	32	16.8
50-64 years	8	17.4	5	27.8	6	9.7	8	21.6	4	14.8	31	16.3
65+years	3	6.5	1	5.5	5	8.1	7	18.9	1	3.7	17	8.9
Total	46	100.0	18	100.0	62	100.0	37	100.0	27	100.0	190	100.0

..... 88

6.6 SEX DISTRIBUTION OF ILLNESS EPISODES

The sex distribution of affected persons is shown in table 6.7 which indicates that the incidence of morbidity among females is higher than the males. There are considerable variations in the number of episodes reported for males and females according to the type of village. For instance, in the remote villages the number of illness episodes reported by the females was twice than those of males.

6.7 MORBIDITY INCIDENCE AND PREVALENCE RATES

The incidence and prevalence rates shown in table 6.8 have been calculated as under:

(a) Incidence Rate $= \dfrac{\text{Number of new spells of illness}}{\text{Population at risk}} \times 100$

(b) Period prevalence rate $= \dfrac{\text{Number of persons who are sick sometime during the reference period}}{\text{Average number of persons exposed to risk during that period}} \times 100$

It could be seen that the incidence and period prevalence rates work out to be 4.6 and 7.9 respectively. The females have higher incidence rate 5.4 as against 3.8 for the males. Although the prevalence rate for females is also higher 8.8 as compared to 7.1 for males, the difference is only marginal.

..... 89

TABLE 6.7

Distribution of illness episodes by sex and type of village

	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Male	22	47.8	7	38.9	32	51.6	17	45.9	9	33.3	87	45.3
Female	24	52.2	11	61.1	30	48.4	20	54.1	18	66.7	103	54.2
	46	(100.0)	18	(100.0)	62	(100.0)	37	(100.0)	27	(100.0)	190	(100.0)

This indicates that males suffer more from long duration of illnesses than the females. The age distribution of incidence and prevalence rates show that both these rates are significantly higher for younger children and those of older age groups.

On the assumption that there is not much variation in these rates during different periods of the year, average number of episodes per year have been worked out both for males and females and for different age groups. On an average a persons will have 1.4 illness episodes in a year. This information has been further used to project number of episodes in a year for a PHC area convening 100,000 population. (Table 6.8).

6.8 PROFESSIONAL CONSULTATION

The proportion of illness cases in which professional help was sought is shown in table 6.9. It could be seen from this table that in less than two-thirds '6.4%) of the episodes some medical practitioner was consulted. Further, the proportion of episodes with consultation was highest in the PHC headquarter village and lowest in the village which is within five kilometres from the PHC headquarter. However, no clear relationship is established between the type of village and the rate of consultation. (Table 6.9).

TABLE 6.8

MORBIDITY INCIDENCE AND PREVALENCE RATES BY AGE AND SEX

Age group	Total No. of individuals	Total No. of episodes new & old	Period prevalence rate	No. of episodes occurring during ref. period (new episodes)	Incidence rate	Estimated No. of episodes in a year	Average No. of episodes	Estimated population in PHC area	Expected episodes per annum in a PHC area
1 year	78	3	11.5	6	7.7	1.82	0.07	3267.7	228.7
1-4	232	32	13.8	27	11.6	2.86	0.11	9719.3	1069.1
5-14	613	29	4.7	20	3.3	0.78	0.03	25680.8	770.4
15-49	1065	72	6.8	38	3.6	0.78	0.03	44616.7	1338.5
50+	399	48	12.0	19	4.8	1.04	0.04	16715.5	668.6
Total	2387	190	7.9	110	4.6	1.04	0.04	100000	4075.3
Male	1222	87	7.1	47	3.8	0.78	0.03	51190	1535.7
Female	1165	103	8.8	63	5.4	1.30	0.05	48810	2440.5

..... 92

TABLE 6.9

Professional consultation for illness episodes by type of village

Type of village	Total No. of HHS	No.of individuals	No.of illness episodes	No. of illness episode with consultation	Percentage of persons who consulted the practitioner
PHC Headquarters	50	298	46	33	71.7
PHC Village	50	336	18	10	55.5
PHU Villages	100	621	62	39	62.9
SC Villages	100	567	37	24	64.9
Remote Villages	100	565	27	17	63.0
Total	400	2387	190	123	64.7

..... 93

In all those cases where there was an illness episodes and no professional help was sought, the respondents were asked to state reasons for not consulting the practitioner. The main reasons reported in order of their numerical importance are: self medication (31.2%), belief that the disease will cure by itself (19.5%), no money to go to doctor (18.2%), busy in work (11.7), prejudice against doctors (7.8%), none available to accompany the patient to doctor (3.9%) etc.

6.8 PROFESSIONAL CONSULTATION BY NUMBER OF SYMPTOMS

The proportion of episodes for which a practitioner was consulted has been cross-tabulated according to the number of symptoms and is given in table 6.10. As could be seen from the table, there is a direct relationship between number of symptoms and professional consultation i.e. higher the number of symptoms greater the likelihood that a professional help would be sought. (Table 6.10).

TABLE 6.10

Professional consultation by number of symptoms

No. of symptoms	No. of episodes		No. seeking consultation		Percentage of consultation
	N	%	N	%	
1	66	34.7	11	8.9	16.7
2	84	44.2	75	61.0	89.3
3	40	21.1	37	30.1	92.5
Total	190	100.0	123	100.0	64.7

..... 95

6.10 PROFESSIONAL CONSULTATION BY DURATION OF ILLNESS

Whether a practitioner was consulted for the illness has been cross-tabulated by the duration of episode and is shown in table 6.11. The table shows that approximately three-fifths (57.0%) of the episodes are less than 2 weeks duration, while the remaining 42.1 percent of the illnesses are of more than two weeks duration and started before the reference period. Further, about one-fifths (20.6%) of the cases were less than 6 days duration, and a little more than one-thirds (37.4%) were of 6 to 14 days duration. The data does not show any significant relationship between extent of consultation and duration of illness. (Table 6.11).

6.11 TYPE OF PRACTITIONER CONSULTED

With regard to the type of practitioner consulted, the data included in table 6.11 shows that out of the patients who sought professional help for their illness 30.9 percent consulted the doctor at the PHC. One-fourths (25%) sought the help of a doctor at PHU and about one-thirds (35.0%) consulted private practitioners. For the remaining 8.9 percent of the illness episodes, the treatment was obtained from the auxilliary nurse midwives at the sub-centres (Table 6.12).

TABLE 6.11

Professional consultation for illness episodes by duration of illness

Duration of sickness	No. of episodes		No. consulted		% of consultation
	N	%	N	%	
≤ 1 day	10	5.3	6	4.9	60.0
2-5 days	29	15.3	19	15.4	65.5
6-10 days	26	13.7	17	13.8	65.4
11-14 days	45	23.7	28	22.8	61.5
15+	80	42.1	53	43.1	66.3
Total	190	100.0	123	100.0	64.7

..... 97

TABLE 6.12

Type of practitioners consulted by location of patients

	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Doctor at PHC	22	66.7	5	50.0	1	2.6	5	20.8	5	29.4	38	30.9
Doctor at PHU	-	-	1	10.0	24	61.5	3	12.5	3	17.6	31	25.2
Nurses at SC	-	-	-	-	-	-	6	25.0	5	29.4	11	8.9
Other private practitioners	11	33.3	4	40.0	14	35.9	10	41.7	4	23.5	43	35.0
Total	33	100.0	10	100.0	39	100.0	24	100.0	17	100.0	123	100.0

..... 98

6.12 TYPE OF PRACTITIONER CONSULTED BY DURATION OF ILLNESS

An attempt has been made to find out the relat onship, if any, between the type of practitioner and duratio of illness. , There is some indication from the data shown in table 6.13 that in relatively higher proportion of long duratio of illnesses, PHC doctor was consulted, but no clear trend is discernible. (Table 6.13).

6.13 LOCATION OF PRACTITIONERS CONSULTED

An overwhelming majority (75.6%) of the patients consulted the practitioners who were located at the PHC and PHU headquarter villages; in another one-sixths (15.5%) of the cases the medical practitioners consulted were located in distant towns and Bangalore. While most of the patients residing in PHC or PHU villages consulted practitioners who were located in those villages, more than one-thirds (35.3%) of the patients from remote villages went to distant towns for medical treatment and an equal proportion (35.3%) consulted practioners practising at SC villages. The remaining 29.4 of the patients from remote villages went to practitioners lo ated at PHC and/or PHU headquarter villages. As regards patients from SC villages, an overwhelming majority (58.4%) sought treatment from the practitioners located at PHC or PHU villages; and one-fifths (20.8%) of these patients also tra elled to distant towns and/or Bangalore for seeking treatment. Table 6.14).

TABLE 6.13
to
Duration of illness according/type of consultation

Duration of illness	No. of consultation	Type of consultation							
		At PHC		At PHU		At SC		At pvt. doctors	
		N	%	N	%	N	%	N	%
1 day	6	1	16.7	3	50.0	-	-	2	33.3
2-5 days	19	3	15.8	5	26.3	3	15.8	8	42.1
6-10 days	17	4	23.5	4	23.5	1	5.9	8	47.1
11-15 days	24	5	20.8	7	29.2	4	16.7	8	33.3
15 days +	57	25	43.9	12	21.0	3	5.3	17	29.8
	123	38	30.9	31	25.2	11	8.9	43	35.0

..... 100

TABLE 6.14

Location of Practitioners by Location of Patients

Location of Practitioners	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
PHC Headquarters	29	87.9	5	(50.0)	2	5.1	4	16.7	2	11.8	42	34.1
PHU Headquarters	-	-	2	(20.0)	36	92.3	10	41.7	3	17.6	51	41.5
SC Headquarters	-	-	-	-	-	-	5	20.1	6	35.3	11	8.9
Distant town	1	3.0	3	(30.0)	-	-	3	12.5	5	29.4	12	9.8
Bangalore	3	9.1	-	-	1	2.6	2	8.3	1	5.9	7	5.7
Total	33	100.0	10	(100.0)	39	100.0	24	100.0	17	100.0	123	100.0

25-10-82

.....101

6.14 REASONS FOR SELECTING PRACTITIONER

The reasons given by the respondents for chosing a particular practitioner are shown in table 6.15. The most common reason enunciated was patients' or family confidence (39.0%). The next in order of importance were: general popularity and reputation (30.1%); physical accessibility (22.0%); and cost (8.9%). There are some variations in these responses according to the type of practitioner. For instance cost-factor as a reason for selecting a practitioner was mentioned only for government providers of health care. Further, 71 percent of the patients chose the doctor at PHU because of confidence, more than two-fifths (44.7%) consulted the doctors at PHC because of general popularity and reputation, which may be second hand information. It thus seems that patients had more closer contacts with doctors at PHC as compared with PHU doctor. No respondent mentioned cost as a r ason for selec ng a private practitioners; while for the other three reasons responses were almost equally divided.

6.15 NUMBER OF VISITS TO PRACTITIONER

On an average a patient made 2.1 visits to the practitioner during the reference period of two weeks. Further, the average number of visits made was the highest for the patients living in remote villages and lowest for those from SC villages. A little more than one-thirds (35.8%) of the patients visited the practitioner only once during the reference period and the 31.7 percent and 18.7 percent of the patients made 2 and 3

TABLE 6.15

REASONS FOR PREFERENCE OF PRACTITIONER BY TYPE OF PRACTITIONER

Reasons for Preference	Type of Practitioner									
	Doctor at PHC		Doctor at PHU		ANM/Others		Private practitioners		Total	
	N	%	N	%	N	%	N	%	N	%
Patient's or family's confidence	9	23.7	22	71.0	2	18.1	15	34.9	48	39.0
General popularity & reputation	17	44.7	2	6.4	3	27.3	15	34.9	37	30.1
Physical accessibility	7	18.4	4	12.9	3	27.3	13	30.2	27	22.0
Cost factors and others	5	13.2	3	9.7	3	27.3	-	-	11	8.9
Total	38	100.0	31	100.0	11	100.0	43	100.0	123	100.0

..... 103

visits respectively. The percentage of those who visited the practitioners for 4 or more times works out to be 13. Interestingly a large number of patients who made 3 or more visits to the practitioners were from remote villages which lack any government health care facilities. (Table 6.16).

6.16 PATIENTS ESCORT TO PRACTITIONER

The number of persons accompanying the patient to the practitioner is given in table 6.17. As is evident from this table in about one-fourths (26.0%) of the cases, the patients visited the practitioner alone, in approximately two-thirds (65.0%) of the cases they were escorted by one person, and for the remaining 9 percent of the patients two or more persons accompanied them. Further break up of this data according to the type of village of the patient reveals that while all the patients from the village within the effective range of PHC were accompanied by at least one person, more than two-fifths (42.4%) of the patients from the PHC headquarter village went to the medical practitioner on their own. Further, the proportion of patients from PHU village who were escorted to the practitioner was slightly more than the overall average

....104

TABLE 6.16

Number of visits made to practitioners clinic

No. of visits made	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None	1	3.0	-	-	-	-	-	-	-	-	1	0.8
One	9	27.3	3	30.0	15	38.5	12	50.0	5	29.4	44	35.8
Two	14	42.4	5	50.0	11	28.2	5	20.8	4	23.5	39	31.7
Three	7	21.2	1	10.0	6	15.4	6	25.0	3	17.6	23	18.7
Four	2	6.1	1	10.0	7	17.9	1	4.2	5	29.4	16	13.0
	33	100.0	10	100.0	39	100.0	24	100.0	17	100.0	123	100.0
Mean no. of visits	2		2		2.1		1.8		2.5		2.1	

.....105

TABLE 6.17

Number of persons accompanying the patient to practitioner's clinic

Number of persons	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None	14	42.4	-	-	7	17.9	7	29.2	4	23.5	32	26.0
One	15	45.5	9	90.0	30	76.9	15	62.5	11	64.7	80	65.0
Two +	4	12.1	1	10.0	2	5.1	2	8.3	2	11.8	11	9.0
	33	100.0	10	100.0	39	100.0	24	100.0	17	100.0	123	100.0
Average no. of persons accompanying	0.7		1.1		0.8		0.8		0.9		0.8	

..... 106

6.17 PROXY VISITS TO PRACTITIONER

As could be seen from table 6.18, only in 2 out of 123 consultations proxy visits were made to the practitioner. Thus the persons affected themselves visit the practitioners and the practice of some-one else going to the practitioner and bringing the medicines after explaining the symptoms is not very common in this area.

6.18 HOME VISITS BY PRACTITIONER

Only in 4 out of 123 consultations, the medical practitioners visited the home of the patients. All these home visits were made by the government doctors working at PHC and PHU. (Table 6.19).

6.19 DISTANCE TRAVELLED BY PATIENTS FOR CONSULTATION

The average distance travelled by the patients for consulting a medical practitioner works out to be 4.1 kilometres. The patients from remote and SC village travelled on an average a little more than 7 kilometres to reach the practitioner, while those from PHU villages travelled an average of 1.5 kilometres only. It is because PHU villages are comparatively bigger villages and besides a government PHU, many private medical practitioners are practising in those villages. A further break up of the distances travelled indicates that in more than half (52.8%) of the cases the practitioners consulted

TABLE 6.18

Proxy visits to practitioners clinic

No. of proxy visits	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None	33	100.0	10	100.0	38	97.4	24	100.0	16	94.1	121	98.4
1	-	-	-	-	1	2.6	-	-	1	5.9	2	1.6
Total	33	100.0	10	100.0	39	100.0	24	100.0	17	100.0	123	100.0

TABLE 6.19

Home visits by practitioner

No. of home visits by practitioners	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None	31	94.0	10	100.0	37	94.9	24	100.0	17	100.0	119	96.8
1	1	3.0	-	-	2	5.1	-	-	-	-	3	2.4
2 +	1	3.0	-	-	-	-	-	-	-	-	1	0.8
Total	33	100.0	10	100.0	39	100.0	24	100.0	17	100.0	123	100.0

.....108

were located in the villages where the patients reside, while in one-fifths (20.3%) of the cases the distance travelled was between 1-4 kilometres. A little more than one-fourths (26.8%) of the patients had to travel a distance of 5 or more kilometres to consult the practitioners. (Table 6.20).

6.20 DISTANCE TRAVELLED BY TYPE OF PRACTITIONER CONSULTED

The distance travelled by the patients has further been analysed by type of practitioner consulted and is shown in table 6.21. It may be interesting to note from this table that patients travelled much longer distances to consult a private practitioner than the government providers of health care. For instance while the average distance travelled for consulting a doctor at PHC or PHU works out to be 1.7 and 1.4 kilometres, the patients on an average travelled 9.1 kilometres to seek medical treatment from a private practitioner.

6.21 MODE OF TRAVEL TO PRACTITIONER

The mode of travel is usually related to distance. The analysis contained in the previous paragraphs has revealed that 65 percent of the patients travelled only upto 2 kilometres to consult a practitioner. The data shown in table 6.22 which reveals that 63.4 percent walked to the practitioner, is in conformity with the earlier information. Another one-thirds of the patients travelled by bus. In the study area, very little use seems to have been made of bicycle or cart.

TABLE 6.20

Distance of practitioner from location of patients

Distance	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
0-1 km..	29	87.9	-	-	36	92.3	-	-	-	-	65	52.8
1-4 kms	-	-	5	50.0	1	2.6	11	45.8	8	47.0	25	20.3
5-9 kms.	-	-	3	30.0	-	-	8	33.3	5	29.4	16	13.0
10-14 kms.	1	3.0	2	20.0	-	-	-	-	2	11.1	5	4.1
15-19 kms.	-	-	-	-	1	2.6	4	16.7	-	-	5	4.1
20 +	3	9.1	-	-	1	2.6	1	4.2	2	11.1	7	5.6
Total	33	100.0	10	100.0	39	100.0	24	100.0	17	100.0	123	100.0
Mean distance travelled	2.7		2.2		1.5		7.4		7.3		4.1	

..... 110

TABLE 6.21

Distance travelled by patients by type of practitioners

Type of practitioner	No. of patients	Distance travelled in kilometres							Average distance travelled
		1	1	2	3	4	5	6+	
PHC doctor	38	22	2	7	2	-	4	1	1.7
PHU doctor	31	24	1	-	2	3	-	1	1.4
SC Nurse	11	6	4	1	-	-	-	-	0.8
Private medical practitioners	43	13	-	-	1	2	12	15	9.1
Total	123	65	7	8	5	5	16	17	4.1

..... 111

TABLE 6.22

MODE OF TRAVEL OF PATIENTS TO PRACTITIONERS

Mode of Travel	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Walk	29	87.9	3	30.0	35	89.7	5	20.8	6	35.3	78	63.4
Bus	3	9.1	6	60.0	3	7.7	18	75.0	11	64.7	41	33.3
Bicycle	-	-	-	-	-	-	1	4.2	-	-	1	0.8
Cart	-	-	1	10.0	-	-	-	-	-	-	1	0.8
Others	1	3.0	-	-	1	2.6	-	-	-	-	2	1.6
Total	33	100.0	10	100.0	39	100.0	24	100.0	17	100.0	123	100.0

..... 112

6.22 TRAVEL TIME TO PRACTITIONERS

The average time spent by the patients for one way travel to the practitioner works out to be 22.8 minutes. The average time spent was highest (48.7 minutes) for the patients from the village which is less than 5 kilometres from PHC headquarters and lowest (11.9 minutes) for those residing in the PHU headquarter village. The patients from remote and PHC headquarter villages on an average spent 31.3 and 18.9 minutes on travel respectively. Further, for approximately three-fourths (75.6%) of the patients, it took less than 30 minutes to reach the practitioner's clinic. (Table 6.23).

6.23 CONSULTATION CONTENT

In order to gain an integrated understanding of health care provided by the medical practitioners, a number of questions relating to consultation content were asked from the respondents. Table 6.24 gives information about the action taken by the practitioner. As could be seen from this table, in about three-fourths (74.8%) of the cases patient gave spontaneous history of the illness episodes, in 8.4 percent of the cases the practitioners asked questions from the patients; and examination was conducted for 82.1 percent of the patients. The consultation content has further been analysed in relation to the type of practitioner and it has been found that the doctor at PHC asked questions and conducted physical examinations in relatively larger number of cases as compared to other types of practitioners. (Table 6.24).

TABLE 6.23

TRAVEL TIME (ONE WAY) FROM PATIENTS' RESIDENCE TO PRACTITIONERS CLINIC

Travel time	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Less than 15 minutes	24	72.7	2	20.0	34	87.2	-	-	5	29.4	65	52.8
15 min. - 30 min.	5	15.2	1	10.0	2	5.1	18	75.0	2	11.8	28	22.8
30 min. - 1 hour			4	40.0	1	2.6	1	4.2	8	47.1	14	11.4
1 - 2 hours	1	3.0	3	30.0	-	-	1	4.2	1	5.9	6	4.9
2 hours +	2	6.0	-	-	1	2.6	4	16.7	-	-	6	4.9
Can't say	1	3.0	-	-	1	2.6	-	-	1	5.9	3	2.4
Total	33	100.0	10	100.0	39	100.0	24	100.0	17	100.0	123	100.0
Average travel time (min.)	**18.9**		**48.7**		**11.9**		42.5		31.3		22.8	

.....114

TABLE 6.24

Consultation content by type of practitioner

	Doctors at PHC		Doctors at PHU		ANM at SC		Pvt. doctor		Total
No. of patients	38		31		11		43		123
No. of patients giving spontaneous history	31	81.6	23	74.2	5	45.4	29	67.4	71.5
No. of responses where practitioner asked questions	33	86.8	27	87.1	8	72.7	34	79.1	82.9
No. of responses where the practitioner examined the patients	34	89.5	22	71.0	7	63.6	34	79.1	78.9

..... 115

6.24 TYPE OF EXAMINATION BY PRACTITIONERS

So far as type of examination is concerned, in a little more than half (52.0%) of the patients, the practitioner felt the pulse of the patient and in another one-fourths (26.0%) of the cases physical examination was conducted. The number of cases in which blood pressure and/or temperature was taken was reported to be negligible. A cross tabulation of the type of examination with type of practitioner reveals that doctor at PHC conducted physical examination in relatively larger proportion (39.5%) of patients as compared to other type of practitioners who conducted physical examination for about one-fifths of their patients. (Table 6.25).

6.25 LABORATORY TESTS

Of the 123 consultations, only in 17 caseslaboratory tests were recommended. In 9 cases, blood tests and in 3 cases urine test was ordered. In another 3 cases, both blood and urine tests were ordered. The X-ray was suggested in one case and for one patient the practitioner recommended a combination of blood, urine and stool tests. An analysis of laboratory tests ordered by type of practitioner reveals that the ANM's at SC's did not order any tests, while no significant differences have been observed in the pattern of ordering laboratory tests by other type of practitioners. (Table 6.26).

.....116

TABLE 6.25

Type of examination conducted by practitioner by type of practitioner

Type of examination done	Doctor at PHC		Doctor at PHU		ANM at SC		Private doctors		Total	
	N	%	N	%	N	%	N	%	N	%
Read pulse	18	47.4	15	48.4	5	45.4	22	51.2	60	48.8
Read temperature	-	-	-	-	-	-	2	4.7	2	1.6
Physical examination	15	39.5	6	19.4	2	18.2	9	20.9	32	26.0
Read BP	1	2.6	1	3.2	-	-	1	2.3	3	2.4
Not applicable	4	10.5	9	29.0	4	36.4	9	20.9	26	21.1
Total	38	100.0	31	100.0	11	100.0	43	100.0	123	100.0

T. LE 6.26

Laboratory tests ordered by type of practitioner

Type of tests done	Doctor at PHC		Doctor at PHU		ANM at SC		Private doctors		Total	
	N	%	N	%	N	%	N	%	N	%
None	32	84.2	27	87.1	11	100.0	35	81.4	105	85.4
Blood	5	13.1	1	3.2	-	-	3	7.0	9	7.3
Urine	-	-	2	6.4	-	-	1	2.3	3	2.4
X-ray	1	2.7	-	-	-	-	-	-	1	0.8
Blood + urine	-	-	1	3.3	-	-	3	7.0	4	3.2
Blood+Urine+Stool	-	-	-	-	-	-	1	2.3	1	0.8
Total	38	100.0	31	100.0	11	100.0	43	100.0	123	100.0

..... 118

6.26 TYPE OF MEDICATION DISPENSED

In an overwhelming majority (94.3%) of the cases the practitioners consulted dispensed at least some drug to the patients. In four-fifths (79.7%) of the patients the practitioners administered injections. In most cases other drugs were also dispensed in addition to injections and the latter was rarely the only treatment given. It may be interesting to note that the government providers of medical care administered injections in a higher proportion of patients as compared to private medical practitioners. (Table 6.27).

6.27 MEDICATION PRESCRIBED BY PRACTITIONERS

In addition to dispensing medication to 94.3 percent of the patients from their clinics as indicated in paragraph 6.26, approximately half (45.9%) of the patients were given prescriptions and were asked to procure medicine from the drug stores. In most of the cases the drugs prescribed were tablets or capsules. Our analysis further shows that the proportion of cases in which the patients were asked to procure drugs from outside sources is significantly higher for government providers of medical care as compared to the private medical practitioners. (Table 6.28).

.....119

TABLE 6.27

TYPE OF MEDICATION DISPENSED BY TYPE OF PRACTITIONER

Type of medication	Doctor at PHC		Doctor at PHU		ANM/Others at SC		Private doctor		Total	
	N	%	N	%	N	%	N	%	N	%
Injections only	2	5.3	6	19.4	-	-	6	13.9	14	11.4
Injections and tablets or capsules	27	71.0	18	58.1	7	63.6	23	53.5	75	61.0
Tablets or capsules only	4	10.5	2	6.4	1	9.1	3	7.0	10	8.1
Mixtures	-	-	-	-	-	-	2	4.6	2	1.6
Ointment	2	5.3	1	3.2	-	-	1	2.3	4	3.2
Injections/tablets/ or capsules/mixture/ tonic	3	7.9	2	6.4	-	-	4	9.3	9	7.3
Tablets or capsules and mixture	-	-	-	-	-	-	2	4.6	2	1.6
None	-	-	2	6.4	3	27.3	2	4.6	7	5.7
Total	38	100.0	31	100.0	11	100.0	43	100.0	123	100.0

.....120

TABLE 6.27

TYPE OF MEDICATION DISPENSED BY TYPE OF PRACTITIONER

Type of medication	Doctor at PHC		Doctor at PHU		ANM/Others at SC		Private doctor		Total	
	N	%	N	%	N	%	N	%	N	%
Injections only	2	5.3	6	19.4	-	-	6	13.9	14	11.4
Injections and tablets or capsules	27	71.0	18	58.1	7	63.6	23	53.5	75	61.0
Tablets or capsules only	4	10.5	2	6.4	1	9.1	3	7.0	10	8.1
Mixtures	-	-	-	-	-	-	2	4.6	2	1.6
Ointment	2	5.3	1	3.2	-	-	1	2.3	4	3.2
Injections/tablets/ or capsules/mixture/ tonic	3	7.9	2	6.4	-	-	4	9.3	9	7.3
Tablets or capsules and mixture	-	-	-	-	-	-	2	4.6	2	1.6
None	-	-	2	6.4	3	27.3	2	4.6	7	5.7
Total	38	100.0	31	100.0	11	100.0	43	100.0	123	100.0

.....120

6.28 PATTERN OF ADVICE GIVEN BY PRACTITIONERS

In more than half (52.0%) of the patients no dietary or other advice was given to the patients. The remaining patients were mostly advised about diet restrictions or supplements. As regards pattern of advice by different type of practitioners, no significant differences are discernible. (Table 6.29)

6.29 PLACE OF PURCHASE OF PRESCRIBED MEDICINES

In 5 out of 54 cases the patients did not purchase the medicines prescribed by the medical practitioners consulted by them. In most other cases the medicines were either purchased in the villages of residence or nearly town. (Table 6.30).

..... 122

TABLE 6.29

PATTERN OF ADVICE GIVEN BY TYPE OF PRACTITIONER

Type of advice	Doctors at PHC		Doctors at PHU		ANM/Others at SC		Private doctors		Total	
	N	%	N	%	N	%	N	%	N	%
None	23	60.5	14	45.2	7	63.6	20	46.5	64	52.0
Advised on diet	14	36.8	16	51.6	3	27.3	20	46.5	53	43.1
Advised on hygiene	-	-	-	-	1	9.1	1	2.3	2	1.6
Medical care	1	2.6	-	-	-	-	-	-	1	0.8
Others	-	-	1	3.2	-	-	2	4.7	3	2.4
Total	38	100.0	31	100.0	11	100.0	43	100.0	123	100.0

..... 123

TABLE 6.30

PLACE OF PURCHASE OF PRESCRIBED MEDICINES BY VILLAGE OF RESIDENCE OF PATIENTS

Place of purchase	PHC Hqrs.		PH C Village		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Did not purchase	-	-	1	(10.0)	-	-	3	(12.5)	1	(5.9)	5	(4.1)
Place of residence	-	-	-	-	16	(41.0)	-	-	-	-	16	(13.0)
Nearby town	5	(15.2)	2	(20.0)	-	-	7	(29.2)	3	(17.6)	17	(13.8)
Distant town	2	(6.1)	1	(10.0)	1	(2.6)	-	-	-	-	4	(3.2)
Bangalore	2	(6.1	-	-	-	-	2	(8.3)	2	(11.8)	6	(4.9)
Can't say	1	(3.0)	-	-	1	(2.6)	-	-	-	-	2	(1.6)
Not applicable	23	(69.7)	6	(60.0)	21	(53.8)	12	(50.0)	11	(64.7)	73	(59.3)
Total	33	(100.0)	10	(100.0)	39	(100.0)	24	(100.0)	17	(100.0)	123	(100.0)

..... 124

6.30 PRACTITIONER CONSULTATION FEES

The fees paid to the practitioners during reference period of 2 weeks are shown in table 6.31, which indicates that on an average a patient who sought consultation from a practitioner paid Rs.13.92. Those who consulted the private medical practitioners on an average paid Rs.27.81. It may be interesting to note that the respondents also reported to have paid fees to the government providers whose services are supposed to be free. Since private practice for government doctors is permitted in the state of Karnataka, it is possible that many patients consulted the doctors at PHC or PHU as private patients. Our survey findings also indicate that the patients who visited sub-centres on an average paid Rs.5.90 to the ANMs. Our analysis further shows that 38.2 percent of the patients did not pay any fee to the practitioners. Out of the patients who sought consultation at the government health facilities, approximately one-half did not pay any consultation fee . In another about two-fifths (39.0%) of the consultations fees involved was less than rupees ten. The remaining one-sixths of the patients paid fees of more than rupees ten. In many cases the fees charged by the practitioners, particularly private medical practitioners, included the cost of drugs dispensed. It is however, impractical to separate the cost of practitioner consultation fees from the cost of associated drugs.

.....125

TABLE 6.31

FEES PAID TO PRACTITIONER BY TYPE OF PRACTITIONER

Fee (Rs.)	Doctor at PHC		Doctor at PHU		ANM/Others at SC		Private doctors		Total	
	N	%	N	%	N	%	N	%	N	%
Nil	22	57.9	13	41.9	5	45.4	7	16.3	47	38.2
≤ 5	8	21.1	8	25.8	3	27.3	12	27.9	31	25.2
6-10	2	5.3	5	16.1	1	9.1	9	20.9	17	13.8
11-50	2	5.3	-	-	-	-	12	27.9	14	11.4
51-100	1	2.6	1	3.2	1	9.1	1	2.3	4	3.2
100 +	1	2.6	-	-	-	-	2	4.7	3	2.4
Can't say	2	5.3	4	12.9	1	9.1	-	-	7	5.7
Total	38	100.0	31	100.0	11	100.0	43	100.0	123	100.0
Mean fee paid	7.05		4.40		5.90		27.81		13.92	

6.31 COST OF PRESCRIBED DRUGS

On an average during a two-week period an expenditure of Rs.7.27 was incurred on drugs prescribed by the practitioners. It is interesting to note that expenditure incurred on drugs prescribed by private medical practitioners was slightly higher than those prescribed by the doctors at PHC or PHU. Further in 70.7 percent of the cases no drugs were purchased from outside and interestingly a significantly higher proportion of patients who consulted the government providers of medical care did not purchase medicines, as compared to those who were attended by private medical practitioners. An overwhelming majority of those who purchased drugs from outside spent less than rupees twenty. (Table 6.32).

6.32 COST OF TRAVEL

An amount of Rs.2.81 was spent on an average as cost of travel to the practitioners during a reference period of two weeks. The amount incurred on travel was significantly higher (Rs.4.71) for patients who consulted private medical practitioners as compared to those who visited PHCs or PHUs (Rs.2.12). Further, approximately two-thirds (64.2%) of the patients did not incur any expenditure on travel. (Table 6.33).

.....127

TABLE 6.32

COST OF DRUGS ACCORDING TO TYPE OF PRACTITIONERS

Cost of drugs	Doctor at PHC		Doctor at PHU		ANM/Others at SC		Private doctors		Total	
	N	%	N	%	N	%	N	%	N	%
None	32	84.2	22	71.0	9	81.8	24	55.8	87	70.7
1-5	2	5.3	1	3.2	-	-	5	11.6	8	6.5
6-20	1	2.6	6	19.4	1	9.1	9	20.9	17	13.8
21-50	1	2.6	-	-	1	9.1	4	9.3	6	4.9
51-150	2	5.3	2	6.4	-	-	1	2.3	5	4.1
150+	-	-	-	-	-	-	-	-	-	-
Total	38	(100.0)	31	(100.0)	11	(100.0)	43	(100.0)	123	(100.0)
Meancost of drugs	7.10		7.61		3.50		8.13		7.27	

..... 128

TABLE 6.33

COST OF TRAVEL ACCORDING TO TYPE OF PRACTITIONER

Cost of Travel	Doctors at PHC		Doctors at PHU		ANM/Others at SC		Private doctors		Total	
	N	%	N	%	N	%	N	%	N	%
None	24	63.2	23	74.2	11	(100.0)	21	48.8	79	64.2
Less than Rs.5	7	18.4	5	16.1	-	-	8	18.6	20	16.3
6-15	4	10.5	1	3.2	-	-	9	20.9	14	11.4
16-25	-	-	-	-	-	-	1	2.3	1	0.8
25+	1	2.6	1	3.2	-	-	1	2.3	3	2.4
Can't say	2	5.3	1	3.2	-	-	3	7.0	6	4.9
Total	38	100.0	31	100.0	11	(100.0)	43	100.0	123	100.0
Mean cost of drugs	2.11		2.13		0.00		4.71		2.81	

..... 129

6.33 COST OF TRAVEL FOR PATIENT ESCORT

The average cost of travel for escorting the patient to the practitioner works out to be Rs.2.23. Here again, the average cost is significantly higher for these cases who sought consultation with the private medical practitioners as compared to those who visited government providers of medical care. (Table 6.34).

.....130

TABLE 5.34

COST OF TRAVEL (ESCORT) BY TYPE OF PRACTITIONER

Cost of travel (Escort)	Doctor at PHC		Doctor at PHU		ANM/Others at SC		Private doctor		Total	
	N	%	N	%	N	%	N	%	N	%
None	30	78.9	25	80.6	9	81.8	25	58.1	89	72.4
Less than Rs.5	4	10.5	3	9.7	2	18.2	8	18.6	17	13.8
6-14	3	7.9	3	9.7	-	-	5	11.6	11	8.9
15-24	1	2.6	-	-	-	-	4	9.3	5	4.1
25+	-	-	-	-	-	-	1	2.3	1	0.8
Total	38	100.0	31	100.0	11	100.0	43	100.0	123	100.0
Mean cost of Travel (Escort)	1.60		0.70		0.45		4.45		2.23	

.....131

6.34 OTHER INCIDENTAL EXPENSES

The cost of special nutrients and added home care is shown in table 6.35. The average expenditure on these items works out to be Rs.12.26. Here again the average cost works out to be significantly higher for those who visited private medical practitioners as compared to those who sought treatment at government facilities. The conclusion which could be drawn from this data is that private medical practitioners recommend supplementary diet as compared to the doctors available at government health facilities. (Table 6.35).

6.35 TOTAL COSTS

When we add all the costs the total average expenditure for a two week period works out to be Rs.38.47. There are considerable differentials in the cost incurred according to sources of medical care. The average total expenditure for those who consulted private medical practitioners works out to be Rs.62.79, as against Rs.29.61 and Rs.24.01 for those who consulted doctors at PHC and PHU respectively. For those who visited sub-centres and sought treatment for AN's the average total cost adds to Rs.12.30 for a two week period .

.....132

TABLE 6.35

COST OF ADDITIONAL RECOMMENDED ITEMS BY TYPE OF PRACTITIONERS

Cost of Additional items	Doctor at PHC		Doctor at PHU		ANM/Others at SC		Private doctors		Total	
	N	%	N	%	N	%	N	%	N	%
None	25	65.8	12	38.7	8	72.7	8	18.6	53	43.1
≤ Rs.5	4	10.5	5	16.1	2	18.2	8	18.6	19	15.4
6-14	2	5.3	4	12.9	-	-	9	20.9	15	12.2
15-24	3	7.9	4	12.9	1	9.1	7	16.3	15	12.2
25+	3	7.9	3	9.7	-	-	7	16.3	13	10.6
DK	1	2.6	3	9.7	-	-	4	9.3	8	6.5
Total	38	100.0	31	100.0	11	100.0	43	100.0	123	100.0
Mean cost of additional items	11.75		9.17		2.45		17.7		12.26	

..... 133

Assuming that there are no major variations in the incidence of morbidity and same pattern of consultation and expenditure is followed over a period of one year, our calculations show that annual private per capita expenditure on medical care would be Rs.40.00. Since we know that there are considerable seasonal variations in the incidence of illness in the community and the above assumptions are not very realistic, these figures are only suggestive and show the magnitude of expenditure incurred by the communities on medical care. For arriving at a reasonably accurate annual costs, a longitudinal study covering at least a period of one year would be necessary. (Table 6.36).

6.36 MODE OF PAYMENT OF MEDICAL COSTS

The mode of payment of medical cost incurred is shown in table 6.37 which indicates that in about two-thirds (65.9%) of the cases the payment was made in cash. In another one-fifths (20.3%) of the cases deferred payment facilities were availed; and in 8.1% of the cases the medical care costs were met by borrowing money from relatives or friends. (Table 6.37).

6.37 TIME LOST FROM NORMAL ACTIVITIES DUE TO ILLNESS

The information was also collected about number of days on which normal activity was not performed due to illness. This information was obviously not applicable to pre-school children under the age of 5 and those who normally are not in any activity due to old age. The data shows that during the reference period of two weeks on an average a sick person lost 4.9 days of his normal activity. The time lost has further been analysed with respect to village of residence of the affected person and some differentials can be seen from table 6.38

TABLE 6.36

SUMMARY OF EXPENDITURE PER EPISODE BY TYPE OF PRACTITIONER

Type of Practitioner	Average fee paid to doctor	Average cost on drugs	Average cost on travel (patient)	Average cost on travel (patient)	Average cost on additional items	Average total cost
Doctor at PHC	7.05	7.10	2.11	1.60	11.75	29.61
Doctor at PHU	4.40	7.61	2.13	0.70	9.17	24.01
ANM/Others at SC	5.90	3.50	0.00	0.45	2.45	12.30
Private doctors	27.81	8.13	4.70	4.45	17.70	62.79
Total	13.9	7.27	2.81	2.23	12.26	38.47

.....135

TABLE 6.37

MODE OF PAYMENT OF MEDICAL COSTS BY PATIENTS ACCORDING TO TYPE OF PRACTITIONERS

Mode of payment	Doctor at PHC		Doctor at PHU		ANM/Others at SC		Pvt. doctors		Total	
	N	%	N	%	N	%	N	%	N	%
Deferred payment	13	34.2	6	19.4	2	18.2	4	9.3	25	20.3
Paid by cash	19	50.0	20	64.5	7	63.6	35	81.4	81	65.9
Paid by loan	4	10.5	2	6.4	2	18.2	2	4.6	10	8.1
Can't say	2	5.3	3	9.7	-	-	2	4.6	7	5.7
Total	38	100.0	31	100.0	11	(100.0)	43	(100.0)	123	100.0

.....136

TABLE 6.38

NUMBER OF DAYS LOST DUE TO ILLNESS BY VILLAGE OF PATIENTS RESIDENCE

No. of working days	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Less than 1 day	12	26.1	12	66.7	29	46.8	22	59.5	7	25.9	82	43.2
2 - 5 days	3	6.5	1	5.5	11	17.7	-	-	7	25.9	22	11.6
6 - 10 days	4	8.7	1	5.6	3	4.8	6	16.2	1	3.7	15	7.9
> 10 days	11	23.9	4	22.2	7	11.2	7	18.9	4	14.8	33	17.4
Not applicable*	16	34.8	-	-	12	19.4	2	5.4	8	29.6	38	20.0
Total	46	100.0	18	100.0	62	100.0	37	(100.0)	27	100.0	190	100.0
Mean	6.9		4.2		3.8		4.8		5.0		4.8	

* Not applicable includes pre-school children and/other non-earner.

.....137

CHAPTER VII

MATERNAL, CHILD HEALTH AND FAMILY PLANNING

1. Age at marriage
2. Fertility profile of women
3. Age specific and Total Fertility rates
4. Place of Birth of last child
5. Antental problems
6. Intranatal problems
7. Postnatal problems
8. Problems of the newborn
9. Source of Antenatal Care
10. Source of Care during delivery
11. Source of Postnatal Care
12. Cost of Pregnancy
13. Family Planning methods used

CHAPTER VII

MATERNAL, CHILD HEALTH AND FAMILY PLANNING

7.1 AGE AT MARRIAGE

Age at marriage has been considered an important factor influencing fertility. The classic example often cited is that of Ireland, where maternal fertility is largely uncontrolled and age of marriage is very high, the birth rate is much lower than the other developing countries of Asia, Africa and Latin America. The argument often advanced is that an increase in the age of marriage shortens the reproductive span and delays the onset of child bearing which consequently results in the reduction of fertility. Marriage, as has been well documented in the census reports of the past hundred years, is almost universal in India. It is not only a social instituion but a religious duty as well. Marriages are also performed at a very early age and even after about a century of social reforms, however, child marriages have not completely disappeared from the country. In 1929, the Child Marriage Restraint Act (Sarda Act) was passed in India, wherein the age of marriage was raised from 13 to 14 and under the Hindu Code Bill it was again raised to 15 in 1956. The minimum legal age at marriage has now been raised to 19 years for girls and 21 for boys. While the former Acts were aimed at emancipating very young girls from forced marriages, the recent legislation is intended to relieve the country from tremendous

.....138

population pressures. The effect of legislative measures has, however, been minimal and a vast majority of the people have been carrying on with their old customs and traditional practices of marrying off their daughters at relatively young ages. This has been corroborated from the results of this study. The results of our analysis show that out of 371 married women in our sample, 22.4 percent were married when they were less than 14 years. The percentage of women who got married when they were between the ages of 15-17 and 18-20 works out to be 43.9 and 27.2 respectively. The proportion of women whose marriage took place after the age of 20 has been found to be negligible. The mean age at marriage of the women in our sample works out to be 16.1. Further, as could be seen from table 7.1, no significant intra-village differentials have been found in the age at marriage.

7.2 FERTILITY PROFILE OF WOMEN

The fertility profile of women in our sample is shown in table 7.2. The table indicates that on an average a woman had 3.6 pregnancies. The mean number of pregnancies for women in the age group 15-20 works out to be 1.0 and it reaches 6.2 for the women who are between the age of 45-49 and are nearing the end of their reproductive period. The crude birth rate for the study of population works out to be 33.1. Further the number of children born alive and those living was reported to be 3.3 and 2.7 respectively. Out of the living children

TABLE 7 1

AGE AT MARRIAGE BY TYPE OF VILLAGE

Age at marriage	Type of Village										Total	
	PHC Hqrs.		PHC Village		PHU Villages		SC Villages		Remote Villages			
	N	%	N	%	N	%	N	%	N	%	N	%
Less than 14 years	13	(33.3)	10	(20.0)	19	(19.0)	15	(16.8)	26	(23.0)	83	22.4
15 - 17 years	16	(41.0)	29	(58.0)	45	(45.0)	36	(40.4)	37	(39.8)	163	43.9
18 - 20 years	9	(23.1)	8	(16.0)	26	(26.0)	33	(37.1)	25	(26.9)	101	27.2
21 - 24 years	1	(2.6)	1	(2.0)	6	(6.0)	3	(3.4)	4	(4.3)	15	4.0
25 + years	-	-	-	-	1	(1.0)	-	-	-	-	1	0.3
Can't say	-	-	2	(4.0)	3	(3.0)	2	(2.2)	1	(1.1)	8	2.2
	39	100.0	50	100.0	100	100.0	89	100.0	93	100.0	371	100.0
Average age at marriage	15.8		15.4		16.2		16.5		16.1		16.1	

.....140

TABLE 7.2

FERTILITY PROFILE OF WOMEN IN REPRODUCTIVE AGE GROUPS

Age group of women	No.of women	Mean No. of Living Children			Mean no. of children born alive but died	Mean no. of still-births	Mean no. of abortions	Average total number of pregnancies
		Boys	Girls	Total				
15-20	63	0.5	0.4	0.9	0.06	0.01	0.09	1.0
21-24	46	0.6	0.7	1.3	0.10	0.04	0.02	1.5
25-34	144	1.4	1.3	2.7	0.70	0.08	0.16	3.7
35-44	77	2.2	1.9	4.1	0.90	0.05	0.26	5.3
45+	43	2.4	1.9	4.3	1.23	0.14	0.44	6.2
Total	373	1.4	1.3	2.7	0.61	0.06	0.18	3.6

..... 141

1.4 are boys and 1.3 are girls. It has been generally found that the sex ratio at birth is equal. In our study also it was found that equal number of male and female babies had been born during a period of one year prior to the date of the survey. The inference which could be drawn is that more female children have died than the males. This is because of the strong preference for a male child in India, which stems from a variety of social, economic and religious reasons, and which results in the general neglect of female children.

Since the study of foetal mortality has considerable public health, social and demographic significance, an attempt was also made to find out the incidence of foetal mortality among our sample women. When used synonymously with abortion, foetal death refers to the termination of pregnancy before the foetus attains viability outside the womb; usually 28 weeks. If the foetus is expelled after 28 weeks but before the end of gestation, it is termed "premature birth". Because the term 'abortion' is vague and has acquired a pejorative meaning in popular usage, the World Health Organisation has recommended the phrase "foetal death" to describe the outcome of pregnancy other than live births. The foetal mortality is defined as the combined number of induced abortions, spontaneous abortions and still births per 1000 pregnancies. According to this definition the rate for our study population works out to be 66.7.

..... 142

7.3 AGE SPECIFIC AND TOTAL FERTILITY RATES

The age specific fertility rates have been obtained by dividing the number of births occurring to the women in a given age group by the total population of women in that age group and are shown in table 7.3. It could be seen that the highest fertility rate is for the age group 15-19 and thereafter it starts declining. The sum of age specific fertility rates is called Total Fertility Rate.

$$R_{TF} = \frac{k}{c} \sum_{i=15}^{49} r_{fi}$$

k = length of class interval (commonly 5 or 1)

c = constant used to compute r_{fi}

r_{fi} = specific rates according to fi "i" age groups.

The Total Fertility Rate for our study population works out to be 6.66.

7.4 PLACE OF BIRTH OF LAST CHILD

It is the common practice in the study area that women go to their natal homes for delivery, particularly when it is the first child. Each woman who gave birth during a period of one year preceding the date of interview was asked about the place of delivery of her child. The information thus obtained is shown in table 7.4, which indicates that

.....143

TABLE 7.3

AGE SPECIFIC AND TOTAL FERTILITY RATES

Age group of women	No. of women	No. of births	ASFR
15-19	36	17	.472
20-24	73	30	.411
25-29	80	16	.200
30-34	64	9	.141
35-39	46	5	.109
40-44	31	-	-
45-49	43	-	-
	373	77	1.333 x 5
			TFR = 6.665

approximately two-fifths (38.2%) of the births took place at the couples homes and another one-thirds (31.6%) of the women reported that they delivered the child at their natal home. The proportion of births which took place at the health centre or hospital have been found to be negligible.

.....144

TABLE 7.4

PLACE OF BIRTH OF LAST CHILD BY TYPE OF VILLAGE

Place of birth	Type of Village											
	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Couple's home	1	20.0	4	36.4	10	45.4	7	35.0	7	38.9	29	38.2
Natal home	-	-	4	36.4	6	27.3	9	45.0	5	27.7	24	31.6
Govt. Health Centre	2	40.0	-	-	1	4.5	-	-	-	-	3	3.9
Pvt. doctor/hospital	2	40.0	-	-	1	4.5	-	-	3	16.7	6	7.9
Not ascertained	-	-	3	27.2	4	18.2	5	20.0	3	16.7	15	18.4
Total	5	100.0	11	100.0	22	100.0	21	100.0	18	100.0	77	100.0

..... 145

7.5 ANTENATAL PROBLEMS

Each woman who had delivered during the last one year was further asked if she had any problems relating to the pregnancy. About three-fourths (75.3%) of the women did not report any problems while the remaining women indicated that they had pain in abdomen, nausea, oedema of feet, bleeding/ vagina etc. The details are given in table 7.5.

7.6 INTRANATAL PROBLEMS

So far as problems during delivery are concerned more than four-fifths (81.8%) of the deliveries were reported to be normal. Only 4 deliveries were reported to be of complicated nature involving heavy bleeding, malpresentation etc. The type of intra-natal problems can be seen from table 7.6.

7.7 POST-NATAL PROBLEMS

Approximately one-fifths (20.8) of the women reported problems after delivery. The problems indicated by the respondents were : general oedema, abdominal pain, anaemia etc The details are shown in table 7.7.

7.8 PROBLEMS OF THE NEW BORN

Only 6 out of 77 women reported problems of the new born such as urinary infection, gastroenteritis, anaemia, fever etc. (Table 7.8).

.....146

TABLE 7.5

ANTENATAL PROBLEMS OF WOMEN BY TYPE OF VILLAGE

Antenatal problems	Type of Village											
	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None	3	60.0	10	90.9	13	59.1	17	80.9	15	83.3	58	75.3
Pain in abdomen	-	-	-	-	3	13.6	3	14.3	1	5.6	7	9.1
Nausea	-	-	-	-	1	4.5	-	-	-	-	1	1.3
Oedema of feat	1	20.0	-	-	1	4.5	-	-	-	-	2	2.6
Bleeding per vagina	-	-	1	9.1	-	-	-	-	1	5.6	2	2.6
Others	1	20.0	-	-	1	4.5	-	-	-	-	2	2.6
Can't say	-	-	-	-	3	13.6	1	4.8	1	5.6	5	6.5
Total	5	100.0	11	100.0	22	100.0	21	100.0	18	100.0	77	100.0

..... 147

TABLE 7.6

INTRANATAL PROBLEMS BY TYPE OF VILLAGE

Intranatal problems	Type of Village											
	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None	5	100.0	10	90.9	18	81.8	14	66.7	16	88.9	63	81.8
Heavy bleeding	-	-	-	-	1	4.5	-	-	-	-	1	1.3
Malpresentation	-	-	-	-	1	4.5	-	-	-	-	1	1.3
Difficult labour	-	-	1	9.1	-	-	1	4.8	-	-	2	2.6
N.A	-	-	-	-	2	9.1	6	28.5	2	11.1	10	13.0
Total	5	100.0	11	100.0	22	100.0	21	100.0	18	100.0	77	100.0

.....148

TABLE 7.7

POSTNATAL PROBLEMS OF WOMEN BY TYPE OF VILLAGE

Post-natal problems	Type of Village											
	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None	4	80.0	10	90.9	17	77.3	15	71.4	15	83.3	61	79.2
General oedema	-	-	-	-	-	-	1	4.8	-	-	1	1.3
Abdominal pain	1	20.0	-	-	2	9.1	1	4.8	-	-	4	5.2
Anaemia	-	-	-	-	-	-	2	9.5	-	-	2	2.6
Others	-	-	1	9.1	3	13.6	2	9.5	3	16.7	9	11.7
Total	5	100.0	11	100.0	22	100.0	21	100.0	18	100.0	77	100.0

..... 149

TABLE 7.8

PROBLEMS OF THE NEWBORN BY TYPE OF VILLAGE

Problems of Newborn	Type of Villages											
	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None	5	100.0	10	90.9	20	90.9	19	90.5	17	94.4	71	92.2
Urinary infection	-	-	-	-	-	-	-	-	1	5.6	1	1.3
Gastroenterity	-	-	1	9.1	-	-	-	-	-	-	1	1.3
Anaemia	-	-	-	-	1	4.5	-	-	-	-	1	1.3
Fever	-	-	-	-	-	-	2	9.5	-	-	2	2.6
Others												
Total	5	100.0	11	100.0	22	100.0	21	100.0	18	100.0	77	100.0

.....150

7.9 SOURCE OF ANTENATAL CARE

Each women was asked if she had sought check up and medical care during the gestation period. A little more than three-fifths (62.3%) of the responses were negative. Out of the remaining 29 women, 20 women sought antenatal care at the government health facilities, while private medical practitioners provided antenatal care to 9 women. It could be further seen from table 7.9 that women residing in the PHC headquarter village or villages within 5 kilometres from PHC went to PHC for antenatal care, and the women residing in the sub-centre villages, by and large, sought antenatal check up and care from ANM at the sub-centres. Those seeking care from the private medical practitioners were mainly from the PHU or remote villages. It may be worth mentioning here that villages where PHU's are located are bigger in size and many private medical practitioners are located there.

7.10 REASONS FOR PREFERENCE OF SOURCE OF ANTENATAL CARE

Each woman who reported to have sought antenatal care was asked to indicate reasons for selecting a particular source of such care. The reasons given by the respondents in order of their numerical importance are: acquaintance with the provider due to frequent prior contacts (14 responses), easy accessibility (8 responses), reputation for better quality care (6 responses). (Table 7.10).

.....151

TABLE 7.9

SOURCE OF ANTENATAL CARE PROVIDED BY TYPE OF VILLAGE

Source	Type of Villages											
	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None	2	40.0	8	72.7	11	50.0	15	71.4	12	66.7	48	62.3
PHC	3	60.0	3	27.3	2	9.1	-	-	2	11.1	10	13.0
PHU	-	-	-	-	4	18.2	-	-	-	-	4	5.2
SC	-	-	-	-	-	-	5	23.8	1	5.5	6	7.8
Private doctor/others	-	-	-	-	5	22.7	1	4.8	3	16.7	9	11.7
Total	5	100.0	11	100.0	22	100.0	21	100.0	18	100.0	77	100.0

RS-120
2.810

.....152

TABLE 7.1C

REASONS FOR PREFERENCE OF REPORTED SOURCES OF ANTENATAL CARE BY TYPE OF VILLAGE

Reasons	Type of Villages											
	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Easily accessible	-	-	1	9.1	2	9.1	1	4.8	4	22.2	8	10.4
Well acquainted due to frequent prior contacts	1	20.0	3	27.3	5	22.7	5	23.8	-	-	14	18.2
Reputation for better quality of care	2	40.0	1	9.1	2	9.1	1	4.8	-	-	6	7.8
Not applicable/No response	2	40.0	6	54.5	13	59.1	14	66.6	14	77.7	49	63.6
	5	100.0	11	100.0	22	100.0	21	100.0	18	100.0	77	100.0

.....153

7.11 SOURCE OF CARE DURING DELIVERY

As regards source of care during delivery, it is very interesting to note from table 7.11 that one-thirds (33.8%) of the deliveries reported to have been conducted by PHC. PHU or SC staff i.e. government providers of health care. The traditional birth attendants (Dais) conducted a little more than one-fifths (20.8%) of the deliveries. Another important source of care during delivery was the family members.

7.12 REASONS FOR PREFERENCE OF SOURCE OF CARE DURING DELIVERY

The reasons for selecting a particular source of care during delivery are indicated in table 7.12. The most important reasons reported by the respondents in order of their numerical importance are: reputation for skilled care (28.6%), easy accessibility (22.1%), provider's experience (17.5%).

7.13 SOURCE OF POST-NATAL CARE

An overwhelming majority (70.1%) of the women who had given birth during one year prior to the date of investigation reported that they did not receive any professional help during the post-natal period. Most of the other women who indicated that they were given post-natal care pointed out that main sources of this care were the government health workers from the PHC, PHU and SC. (Table 7.13).

.....154

TABLE 7.11

SOURCE OF CARE DURING DELIVERY BY TYPE OF VILLAGE

Source of care	Type of Villages											
	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None	-	-	3	27.3	-	-	1	4.8	1	5.5	5	6.5
Family elders	-	-	2	18.2	3	13.6	1	4.8	4	22.2	10	13.0
Dai	1	20.0	2	18.2	6	27.3	4	19.0	3	16.7	16	20.8
PHC/PHU/SC	2	40.0	1	9.1	8	36.4	12	57.1	3	16.7	26	33.8
Pvt. doctor	-	-	-	-	1	4.5	-	-	-	-	1	1.3
Neighbours	-	-	1	9.1	-	-	-	-	1	5.6	2	2.6
Can't say	2	40.0	2	18.2	4	18.2	3	14.3	6	33.3	17	22.1
Total	5	100.0	11	100.0	22	100.0	21	100.0	18	100.0	77	100.0

TABLE 7.12

REASONS FOR PREFERENCE OF SOURCE OF CARE DURING DELIVERY BY TYPE OF VILLAGE

Reasons	Type of Villages											
	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Reputation for skilled care	2	40.0	1	9.1	8	36.4	10	47.6	1	5.5	22	28.6
No time to call any one else	1	20.0	4	36.4	4	18.2	3	14.3	5	27.8	17	22.1
Professional experience	-	-	2	18.2	5	22.7	4	19.0	4	22.2	15	19.5
Related to patient	-	-	-	-	1	4.5	-	-	-	-	1	1.3
Others	-	-	-	-	-	-	-	-	2	11.1	2	2.6
Can't say	2	40.0	4	18.2	4	18.2	4	19.0	6	33.3	20	26.0
Total	5	100.0	11	100.0	22	100.0	21	100.0	18	100.0	77	100.0

TABLE 7.13

SOURCE OF POSTNATAL CARE BY TYPE OF VILLAGE

Source	Type of Villages											
	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None	5	100.0	11	100.0	18	81.8	11	52.4	9	50.0	54	70.1
PHC/PHU/SC	-	-	-	-	2	9.1	4	19.0	1	5.5	7	9.1
Private doctor	-	-	-	-	-	-	1	4.8	1	5.6	2	2.6
Dai	-	-	-	-	-	-	1	4.8	-	-	1	1.3
Can't say			-	-	2	9.1	4	19.0	7	38.9	13	16.9
Total	5	100.0	11	100.0	22	100.0	21	100.0	18	100.0	77	100.0

7.14 REASONS FOR PREFERENCE OF SOURCES OF POST-NATAL CARE

Out of 10 women who reported to have received post-natal care, 6 selected the particular source because of reputation for skilled care and another 3 because of easy access_bility. (Table 7.14).

7.15 COST OF PREGNANCY

The information about the total cost of pregnancy, which includes antenatal, natal and postnatal care, could be obtained only in 34 out of 77 cases. As could be seen from table 7.15 the total expenditure incurred in 44.1 percent of the cases exceeded Rs.500. In another about one-fourths (23.5%) of the cases it ranged between Rs.200-299. The mean total expenditure works out to be Rs.446.90. There are significant differentials in the amount spent according to the type of village in as much as the average for those residing in PHC villages is Rs.750.00 as against Rs.210.00 for those living in remote villages.

.....158

TABLE 7.14

REASONS FOR PREFERENCE OF SOURCE OF POST NATAL CARE BY TYPE OF VILLAGE

Reasons	Type of Villages											
	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Facility nearer	-	-	-	-	-	-	2	9.5	1	5.5	3	3.9
Reputation for skilled care	-	-	-	-	2	9.1	3	14.3	1	5.5	6	7.8
No response/not applicable	5	100.0	11	100.0	20	90.9	16	76.2	16	88.9	68	88.3
	5	100.0	11	100.0	22	100.0	21	100.0	18	100.0	77	100.0

TABLE 7.15

REPORTED COST OF LAST PREGNANCY OF TYPE OF VILLAGE

Expenditure groups	Type of Villages											
	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Rs.99	-	-	1	16.7	-	-	-	-	-	-	1	2.9
100 - 199	-	-	-	-	-	-	2	20.0	1	20.0	3	8.8
200 - 299	-	-	2	33.3	-	-	3	30.0	3	60.0	8	23.5
300 - 399	-	-	2	33.3	1	9.1	1	10.0	1	20.0	5	14.7
400 - 499	-	-	-	-	2	18.2	-	-	-	-	2	5.8
500 +	2	100.0	1	16.7	8	72.7	4	40.0	-	-	15	44.1
Total	2	100.0	6	100.0	11	100.0	10	100.0	5	100.0	34	100.0
Mean cost of pregnancy	750.0		266.7		672.7		364.5		210.0		446.9	

..... 160

7.16 FAMILY PLANNING METHODS USED

In view of mounting concern over population and a great importance contraception in influencing the outcome of fertility behaviour, all the married women in the reproductive age groups were asked if they had ever used any family planning methods. Further, since resistance to family planning is an important health hazard, the appraisal of family planning attitudes and behaviour is very useful for determining the need for this very important service. The data shown in table 7.16 indicates that more than three-fourths (76.0%) of the women had never used any family planning methods. Another 17.5 percent have had tubectomy. The reported use of other methods of family planning has been found to be marginal.

The respondents were also asked the reasons for not using family planning methods. The main reasons indicated by them were : husband/elders hostility, apprehensions about the side effects of various methods, and desire for more children.

..... 161

TABLE 7.16

TYPES OF FAMILY PLANNING METHODS USED BY TYPE OF VILLAGE

Types of FP methods used	Type of villages											
	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None	27	(69.2)	39	(78.0)	76	(76.0)	75	(84.3)	65	69.9	282	(76.0)
Nirodh	-	-	-	-	-	-	1	(1.1)	-	-	1	(0.3)
Tubectomy	8	(20.5)	4	(8.0)	16	(16.0)	11	(12.4)	26	28.0	65	(17.5)
Vasectomy	-	-	3	(6.0)	8	(8.0)	1	(1.1)	1	1.1	13	(3.5)
IUD	1	(2.6)	2	(4.0)	-	-	-	-	-	-	3	(0.8)
Others	-	-	2	(4.0)	-	-	1	(1.1)	1	1.0	4	(1.1)
Can't say/no response	3	(7.7)	-	-	-	-	-	-	-	-	3	(0.8)
Total	39	100.0	50	100.0	100	100.0	89	100.0	93	100.0	371	(100.0)

..... 162

CHAPTER VIII

MORTALITY

1. Mortality by age and sex
2. Causes of deaths
3. Duration of illness of the deceased

CHAPTER VIII

MORTALITY

8.1 MORTALITY BY AGE AND SEX

The study of mortality is important because it is a useful indicator of the health status of the population. Further, due to stable fertility levels and rapid mortality decline in the developing countries, population growth rates have been very high. A wide variety of rates and ratios have been developed to describe mortality in quantitative terms. However crude death rate is the most widely available measure of mortality. It is defined as the number of deaths per 1000 estimated mid year population. The crude death rate for our study population works out to be 9.3.

In addition to mortality level, it is also important to know mortality structure. In this connection sex differentials are of great interest since sex is one of the most fundamental biological and social distinctions. The sex differentials in mortality affect the sex-ratio of the population at a particular age, the chances of marriages, the length of widowhood and many other social and demographic variables. In most countries of the world, the female mortality rates are lower than those of males. However, India, Pakistan and Sri Lanka appear to be an exception to this predominantly universal pattern.

For out sample the crude death rate for the females is 11.4 as against 8.2 for males. This is an indication of the special health problems faced by the females.

The incidence of death also varies greatly with age. Since improvements in mortality affect different age groups to a different extent, an analysis of age distribution of deaths is important to find out the effect of social and economic factors on mortality. The data given in table 8.1 reveals that less than two-fifths (39.1%) of the deceased persons were more than 60 years old; and more than two-fifths (43.5%) of the deaths occurred to the infants less than one year old. The infant mortality rate works out to be 128.2.

8.2 CAUSES OF DEATHS

The cause of deaths reported by the respondents is shown in table 8.2. The symptoms mentioned by the respondents were recorded verbatim by the interviewer and subsequently coded according to International classification of Disease. These codes were then condensed into 30 categories and then into the short list of 12 Broad Categories as indicated in table 5.4. The major causes of deaths in order of their numerical importance are: diseases of pulmonary, nervous systems/sense organs; and old age. A further break up of these causes according to age reveals that most of the infant deaths were due to diarrhoea

.....164

8.3 DURATION OF ILLNESS OF DECEASED PERSONS

It could be seen from table 8.3 that 30.4 percent of the deceased persons had illness for less than one day, and another 21.7 percent were ill for more than 15 days before their death. The duration of illness in case of 21.7 percent ranged between 1 and 15 days. Out of 23 deadonly 12 (52.2%) had sought medical treatment. In 34.8 percent of the cases, it was reported that deaths occurred all of a sudden and there was not time to call or take the patient to a medical practitioner. In the remaining 13.0 percent of the cases, the medical treatment was not sought due to ignorance thinking that the patient will cure by itself.

.....165

TABLE 8.1

AGE AND SEX DISTFIBUTION OF DECEASED PERSONS ACCORDING TO TYPE OF VILLAGE

Age Groups	Type of villages												
	PHC Hqrs.		PHC Villages		PHU Villages		SC Villages		Remote Villages		Total		Grand Total
	M	F	M	F	M	F	M	F	M	F	M	F	M+F
1 year	-	-	1	3	1	1	2	1	1	-	5	5	10
1-4 years	-	-	-	-	-	-	-	1	-	-	-	1	1
5-9 years	-	-	-	-	-	-	-	-	-	-	-	-	-
10-34 years	-	-	-	1	-	-	-	1	-	-	-	2	2
35-59 years	1	-	-	-	-	-	-	-	-	-	1	-	1
60+	2	2	1	-	-	1	-	2	1	-	4	5	9
Total	3	2	2	4	1	2	2	5	2	-	10	13	23

M = Male
F = Female

Infant Mortality Rate : 128.2/1000
Crude death rate : 9.8/1000

.....166

TABLE 8.2

CAUSES OF DEATHS
CAUSES OF DEATHS BY AGE GROUPS

Diagnostic Categories	1 year		1-14		15-34		35-59		60+		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Diarrhoea	2	(20.0)	-	-	-	-	-	-	-	-	2	8.7
Fever	1	(10.0)	-	-	-	-	-	-	-	-	1	4.3
Blood related	-	-	-	-	-	-	-	-	1	11.1	1	4.3
Nervous system/sense organs	3	(30.0)	1	(100.0)	-	-	-	-	-	-	4	17.4
Pulmonary	1	(10.0)	-	-	1	(50.0)	1	(100.0)	3	33.3	6	26.1
G i												
Skin related	1	(10.0)	-	-	-	-	-	-	1	11.1	1	4.3
Muscalo skeletal	-	-	-	-	-	-	-	-	-	-	1	4.3
Contusions	-	-	-	-	-	-	-	-	1	11.1	1	4.3
Old age	-	-	-	-	1	(50.0)	-	-	-	-	1	4.3
Genito-Urinary	1	(10.0)	-	-	-	-			3	33.3	3	13.0
Don't know	1	(10.0)	-	-	-	-	-	-	-	-	1	4.3
											1	4.3
Total	10	(100.0)	1	(100.0)	2	(100.0)	1	(100.0)	9	100.0	23	100.0

CHAPTER IX

SUMMARY AND CONCLUSIONS

CHAPTER IX

SUMMARY AND CONCLUSIONS

9.1 The governmental health care facilities available to Indian villages thus far are mainly through the primary health centres (PHCs). These PHCs were established in 1952, as a part of the community development programme, to take care of health and medical care needs of the people. At present there are 5532 primary health centres and 51,000 sub-centres in India.

9.2 Thus far there has been no systematic effort to evaluate the impact of rural health institutions on the health status of the people. However, sporadic evidence does show that our health services have not been very effective in solving the evergrowing health problems of our rural population. Studies have shown that overall utilization of the PHCs by the community has been rather poor. The awareness and use of these facilities has been limited to the villages where these services are located. People living in the perepheral villages either are unaware of these services or find it difficult to reach them because of communication difficulties and distance. These studies also indicate poor image of PHCs among the rural people. As reported by studies, even among a small proportion of the villagers who have used these facilities majority have shown dissatisfaction with the services, mainly because of non-availability

.....Two

of medicines and impersonal behaviour of health functionaries. Further, the available evidence also show that doctors hardly spend any time on preventive and promotive care. Maternal and child health services remain neglected. A large number of rural people, thus, continue to be attended by private medical practitioners most of whom are not formally trained in any system of medicine.

9.3 This state of affairs is probably due to the fact that there has been no serious effort to assess the health needs of the people and effective ways of meeting those needs. Further there has been no systemic evaluation of the activities of primary health centres which could have provided guidelines for improving the functioning of these rural health institutions.

9.4 A prerequisite to any planned effort to develop rural health services effectively in order to achieve the objective 'Health for All by 2000 AD' is a realistic appraisal of community health needs and the action taken by the people to meet those needs.

9.5 The present study was carried out with the main objective to assess primary health care needs of a rural community and identify ways in which those needs are currently being met. The study was carried out in Solur PHC in Bangalore District of Karnataka State. A total of 400

households were selected for interview by using stratified random sampling techniques. Six schedules were used to collect information from the selected households. Information was also obtained from the records maintained by the health centres and through interviews with various health functionaries.

9.6 The need for economic, social and demographic data for determining health needs has been demonstrated. A large amount of such data was collected and has been analysed.

9.7 The data on age and sex distribution of the population shows that our study population is characteterised by high proportion of infants and children and low proportion of people living beyond the middle age which is typical of a developing country where both fertility and mortality levels are high.

9.8 The level of literacy is an important determinant of health care attitudes and practices, as well as receptivity to change. Our results show that a little more than half (51.7%) of the study population is either literate or have had some formal schooling. Further, level of literacy among the males was found to be significantly higher than the females in as much as while 63.1 percent of the males are literate or had some schooling, the corresponding figure for the females works out to be 37.8 percent.

.....17..

9.9 The main economic activity of the working force in the study area is agriculture in which approximately three-fourths of the working population is engaged. So far as pattern of land holding is concerned, approximately one-thirds do not own any land and another one-thirds own less than two acres. Those owning more than five acres constitute one-sixths of the households. The dependency rate among the study of population is also very high which is typical of a high fertility developing society.

9.10 Regarding marital status of the population, two-fifths of the persons included in our sample are currently married. Further, 54.3 percent of the households are nuclear while the remaining 45.7 percent are extended households. The average size of nuclear and extended households works out to be 4.7 and 7.5 respectively. The average size of household for the total sample is 5.9.

9.11 Housing is an important determinant of health status and consequently the health needs of the population. In our sample 73.2 percent of the houses were found to be pucca, 25.5 percent kuccha and only 1.2 percent of mixed type. All the villages covered by this study are electrified but only about one-thirds of the households have electric connection in their houses. Further approximately one-thirds of the households have only one room accommodation

and another one-half have 2.3 rooms. The percentage of households living in more than 3 room houses is only marginal. The average number of rooms per household and the average number of persons per room works out to be 2.3 and 2.7 respectively. Only 51 of the 400 households have latrines in the houses; 24 of these latrines are of pit type and 27 flush-out type. Approximately one-thirds of the houses have separate bath-rooms and three-fifths have separate kitchens. Further 57.8 percent of the households possess animals and 61.0 percent of them do not have separate cattle sheds and maintain the animals in the same room occupied by persons.

13 One of the most important potential health hazard is unsafe drinking water. The main source of drinking for an overwhelming majority (74.7%) of the households are wells. The tap water supply is available only in PHC and PHU villages.

14 The drainage system and disposal of waste have an important consequence to health. An overwhelming majority (85.2%) of the respondents reported that they deposit the household waste in the composit pit; another 12.5 percent reported random disposal outside the home. About half the respondents reported that the waste water from the houses go to lanes with the working drains. The remaining half reported no apparent drainage system. The drains wherever

.....172

they exist do not work during the rainy season. The dirty water often flows from the houses to the streets where, in the absence of proper diversion, is left to dry itself and often emits bad odour.

9.15 The degree of awareness among our respondents about the location of PHC, PHUs and SCs has been found to be very high. A large number of respondents and/or their family members are reported to have utilized these facilities atleast once. The general satisfaction of the respondents with the services received at these facilities have been reported to be overwhelmingly high. This is in quite contrast to the findings of studies carried out in the past. Since this study has been conducted in only one PHC area, it can not be concluded that there is general improvement in the image of governmental health institutions in the rural areas. However, if our findings can be corroborated by other similar studies this appears to be a very welcome trend.

9.16 The government health workers are supposed to visit each home in their jurisdiction at least once in a month to provide essential primary health care services. Our analysis show that help regarding malaria could reach fewer than one-third of the households. The proportion of respondents having received services such as vaccination, maternal and child health care, family planning etc. was almost negligible.

9.17 As regards immunization, majority of the respondents reported that they and/or their family members have never been immunized against diseases other than small-pox.

9.18 Information solicited with a view to ascertain the need for special services for chronically disabled persons reveals that 4.4 percent of the population is suffering from one of the disabilities such as vision, hearing or speech impairment; hand or leg limitations; impairment of spine; epilepsy; mental illnesses etc.

9.19 Regarding morbidity, our analysis reveals that in 36 per-cent of the households at least one illness episode was reported during the reference period of two-weeks. The age and sex distribution of illness episodes further indicates that the proportion of illness episodes reported for the younger children and older persons was much higher than their numerical strength in the total population. The incidence of morbidity among females was also found to be higher. However, males were found to be suffering more from long duration illnesses than females. The most common illnesses found were of infective and parasitic nature and accounted for about one-thirds of the total complaints. The next in order of numerical importance were complaints related to circulatory and respiratory systems; digestive system; musculo skeletal and connective tissues; skin and subcutaneous tissues; mental nervous and sense organs.

9.20 The medical practitioner was consulted in 64 percent of the episodes. Out of those who sought medical consultation, 30.9 percent consulted the doctor at the PHC, 25 percent sought the help of the doctor at the PHU and 8.9 percent obtained treatment from ANMs at sub-centres. The remaining 35 percent consulted private medical practitioners. On an average the patients made 2.1 visits to the practitioner during the reference period of 2 weeks. In 26 percent of the cases, the patients visited the practitioner alone, while in the remaining 74 percent the patient was escorted by atleast one person. The average distance travelled by the patients for consulting a medical practitioner works out to be 4.1 kilometres. It may be interesting to note that patients travelled longer distances to consult a private practitioner than the government providers of health care.

9.21 The doctor at the PHC asked questions and conducted physical examination in relatively large proportion of cases as compared to other types of practitioners. Of the 123 consultations, only in 17 cases laboratory tests were recommended and no significant differences have been observed in the pattern of ordering laboratory tests by the practitioners except that the ANM's at sub-centres did not order any tests. In an overwhelming majority of the cases the practitioners consulted disagreed at least [illegible] to their opinions. Contrary

to the general belief, the government providers of medical care administered injections in a higher proportion of patients as compared to private medical practitioners. Approximately half the patients were given prescriptions and were asked to procure medicines from drug stores. The proportion of cases in which the patients were asked to procure drugs from outside source is significantly higher for government providers of medical care as compared to private medical practitioners.

9.22 On an average a patient who sought consultation paid Rs.13.92. Those who consulted the private medical practitioners on an average paid Rs.27.81. The respondents also reported to have paid fees to the government providers whose services are supposed to be free. Further, on an average, during a two-week period, an expenditure of Rs.7.27 was incurred on drugs prescribed by the practitioners. The expenditure incurred on drugs prescribed by private medical practitioners was slightly higher than those prescribed by the doctors at the RHC or PHU. An average amount of Rs.2.81 was spent on travel to practitioners and the amount incurred was significantly higher for patients who consulted private medical practitioners as compared to those who visit government health facilities. The average cost of special nutrients and added home care works out to be Rs.12.25. Here again the average

cost works out to be significantly higher for those who visited private medical practitioners as compared to those who sought treatment at government facilities. The total average expenditure for a two-week period works out to be Rs.38.47. The average total expenditure for those who consulted private medical practitioners was about twice than those who consulted government providers of medical care. Assuming that there are no major variations in the incidence of morbidity and same pattern of consultation and expenditure is followed over a period of one year, our calculations show that annual private per-capita expenditure on medical care would be forty rupees. In addition to the direct cost of illness there is also indirect cost involved in terms of time lost from normal activity by the patient and the others attending on him. The data shows that during the reference period of two weeks on an average a sick person lost 4.9 days of his normal activity.

9.23 The mean age at marriage of the women in our sample works out to be 16.1. On an average a woman had 3.6 pregnancies. Further the number of children born alive and living works out to be 3.3 and 2.7 respectively. The crude birth rate and total fertility rate are 33.1 and 6.6 respectively. The foetal mortality rate defined as the combined number of induced abortions, spontaneous abortions and still births per 1000 pregnancies for our study of population works out to be 66.7.

9.24 Approximately two-fifths of the births took place at the couples homes and another one-thirds of the women reported that they delivered the child at their natal home. The proportion of births which took place at the health centre or hospital have been found to be negligible. An overwhelming majority of the women did not report any ante-natal, intra-natal, post-natal problems as well as the problems of the new born. Further a large proportion did not receive any ante-natal or post-natal care. As regards source of care during delivery, one-thirds of the deliveries are reported to have been conducted by government providers, and the traditional birth attendants (Dais) conducted a little less than one-fifths. Another important source of care during delivery was family members. The mean total cost of pregnancy works out to be Rs.447.

9.25 Three-fourths of the women had never used any family planning methods. Another 17.5 percent have had tubectomy. The reported use of other methods of family planning has been found to be marginal. The main reasons indicated by the women for not using family planning are: husband's/elders hostility, apprehensions about the side effects of various methods and desire for more children.

26 The crude death rate and infant mortality rate works out to be 9.8 and 128.2 respectively. The female mortality has been found to be higher than male mortality. The major causes of death in order of their numerical importance are: diseases of pulmonary, nervous systems/sense organs, and old age. Most of the infant deaths were due to diarrhoea and diseases of the nervous system/sense organs.

9.27 Approximately half the deceased persons had sought medical treatment before their death. In about one-thirds of the cases the deaths occurred all of a sudden and there was no time to call or take the patient to the medical practitioner.

9.28 It is evident from the results of this study that the community is utilising the government health facilities primarily for curative services and other preventive, promotive and rehabilitative services are not reaching them adequately. Even with regard to curative services, more than one-thirds of the persons having illness [illegible] did not seek and professional medical help-

government or private. The needs of the community for immunization and MCH services have totally remained neglected. The results of our study also show that 4.5 percent of the population is suffering from disability of one kind or the other. This indicates a need for special services for the rehabilitation of the disabled and services to prevent further disability among the population.

9.29 The estimates based on our findings show that per capita private expenditure on medical care is about Rs.40 which far exceeds the government expenditure on health and medical care services. This indicates that the people are willing to pay for health services. The questions which could be asked are: Is the public receiving good value for its money? Can the money presently spent by the people be used to build up organised health care services? These are the questions of major importance which have so far remained unanswered because no factual basis exists for answering them. The studies, particularly longitudinal covering at least a period of one year, are needed to enable the health planners and policy makers to relate health services to community health services in an optimal manner.